THE IMPROVEMENT OF THE MIND.

ADVERTISEMENT.

"Few books have been peruſed by me with greater pleaſure than his *Improvement of the Mind*, of which the radical principles may indeed be found in Locke's *Conduct of the Underſtanding*; but they are ſo expanded and ramified by *Watts*, as to confer on him the merit of a work in the higheſt degree uſeful and pleaſing. Whoever has the care of inſtructing others, may be charged with deficience in his duty if this book is not recommended,"

Dr. Johnſon's Life of Dr. Watts.

THE IMPROVEMENT OF THE MIND:

OR, A SUPPLEMENT TO THE ART OF LOGIC:

CONTAINING A VARIETY OF

REMARKS AND RULES

FOR THE

ATTAINMENT and COMMUNICATION of useful Knowledge, in RELIGION, in the SCIENCES, and in common Life.

BY *ISAAC WATTS*, D.D.

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THE

THE

PREFACE.

IN the laſt page of the Treatiſe of Logic which I publiſhed many years ago, it is obſerved, that there are ſeveral other things which might aſſiſt the cultivation of the mind, and its improvement in knowledge, which are not uſually repreſented among the principles or precepts of that art or ſcience. Theſe are the ſubjects which compoſe this book; theſe are the ſentiments and rules, many of which I had then in view, and which I now venture into public light.

THE preſent Treatiſe, if it may aſſume the honour of that name, is made up of a variety of remarks and directions for the improvement of the mind in uſeful knowledge. It was collected from the obſervations which I had made on my own ſtudies, and

and on the temper and ſentiments, the humour and conduct of other men in their purſuit of learning, or in the affairs of life; and it has been conſiderably aſſiſted by occaſional collections in the courſe of my reading, from many authors and on different ſubjects. I confeſs, in far the greateſt part I ſtand bound to anſwer for the weakneſſes or defects that will be found in theſe papers, not being able to point to other writers, whence the twentieth part of them is derived.

THE work was compoſed at different times, and by ſlow degrees. Now and then indeed it ſpread itſelf into branches and leaves like a plant in *April*, and advanced ſeven or eight pages in a week; and ſometimes it lay by without growth, like a vegetable in the winter, and did not increaſe half ſo much in the revolution of a year.

AS theſe thoughts occured to me in reading or meditation, or in my notices of the various appearances of things among mankind, they were thrown under thoſe heads which make the preſent titles of the chapters, and were by degrees reduced to ſomething like a method, ſuch as the ſubject would admit.

ON theſe accounts it is not to be expected that the ſame accurate order ſhould be obſerved

obſerved either in the whole book, or in the particular chapters thereof, which is neceſſary in the ſyſtem of any ſcience, whoſe ſcheme is projected at once. A book which has been twenty years a writing, may be indulged in ſome variety of ſtyle and manner, though I hope there will not be found any great difference of ſentiment; for wherein I had improved in later years beyond what I had firſt written, a few daſhes and alterations have corrected the miſtakes: and if the candour of the reader will but allow what is defective in one place, to be ſupplied by additions from another, I hope there will be found a ſufficient reconciliation of what might ſeem at firſt to be ſcarcely conſiſtent.

THE language and dreſs of theſe ſentiments is ſuch as the preſent temper of mind dictated, whether it were grave or pleaſant, ſevere or ſmiling. If there has been any thing expreſſed with too much ſeverity, I ſuſpect it will be found to fall upon thoſe ſneering or daring writers of the age againſt religion, and againſt the chriſtian ſcheme, who ſeem to have left reaſon, or decency, or both behind them in ſome of their writings.

THE ſame apology of the length of years in compoſing this book, may ſerve alſo to excuſe a repetition of the ſame ſentiments

timents which may happen to be found in different places without the author's deſign; but in other pages it was intended, ſo that thoſe rules for the conduct of the underſtanding which are moſt neceſſary, ſhould be ſet in ſeveral lights, that they might with more frequency and more force impreſs the ſoul. I ſhall be ſufficiently ſatisfied with the good humour and lenity of my readers, if they will pleaſe to regard theſe papers as parcels of imperfect ſketches, which were deſigned by a ſudden pencil, and in a thouſand leiſure moments, to be one day collected into landſkips of ſome little proſpects in the regions of learning, and in the world of common life, pointing out the faireſt and moſt fruitful ſpots, as well as the rocks and wilderneſſes, and faithleſs moraſſes of the country. But I feel age advancing upon me, and my health is inſufficient to perfect what I had deſigned, to increaſe and amplify theſe remarks, to confirm and improve theſe rules, and to illuminate the ſeveral pages with a richer and more beautiful variety of examples. The ſubject is almoſt endleſs, and new writers in the preſent and in following ages may ſtill find ſufficient follies, weakneſſes and dangers among mankind, to be repreſented in ſuch a manner as to guard youth againſt them.

THESE

THESE hints, ſuch as they are, I hope may be rendered ſome way uſeful to perſons in younger years, who will favour them with a peruſal, and who would ſeek the cultivation of their own underſtandings in the early days of life. Perhaps they may find ſomething here which may awake a latent genius, and direct the ſtudies of a willing mind. Perhaps it may point out to a ſtudent now and then, what may employ the moſt uſeful labours of his thoughts, and accelerate his diligence in the moſt momentous enquiries. Perhaps a ſprightly youth may here meet with ſomething to guard or warn him againſt miſtakes, and withhold him at other times from thoſe purſuits which are like to be fruitleſs and diſappointing.

LET it be obſerved alſo, that in our age ſeveral of the ladies purſue ſcience with ſucceſs; and others of them are deſirous of improving their reaſon even in common affairs of life, as well as the men: yet the characters which are here drawn occaſionally, are almoſt univerſally applied to one ſex; but if any of the other ſhall find a character which ſuits them, they may by a ſmall change of the termination apply and aſſume it to themſelves, and accept the inſtruction, the admonition, or the applauſe which is deſigned in it.

THERE

THERE is yet another thing which it is neceſſary my reader ſhould be informed of; but whether he will call it fortunate or unhappy, I know not. It is ſufficiently evident that the book conſiſts of two parts: the firſt lays down remarks and rules how we may attain uſeful knowledge ourſelves; and the ſecond, how we may beſt communicate it to others. Theſe were both deſigned to be printed in this volume: but a manuſcript which hath been near twenty years in hand, may be eaſily ſuppoſed to allow of ſuch difference in the hand-writing, ſo many lines altered, ſo many things interlined, and ſo many paragraphs and pages here and there inſerted, that it was not eaſy to compute the number of ſheets that it would make in print: and it now appears, that the remarks and rules about the communication of knowledge being excluded here, they muſt be left to another volume; wherein will be contained various obſervations relating to methods of inſtruction, the ſtyle and manner of it, the way of convincing other perſons, of guarding youth againſt prejudices, of treating and managing the prejudices of men, of the uſe and abuſe of authority, of education, and of the various things in which children and youth ſhould be inſtructed, of their proper buſineſs and diverſions, and

of

of the degrees of liberty and reſtraint therein, *&c.* Of all which I had once deſigned a more complete treatiſe; but my years advancing, I now deſpair to finiſh it.

THE eſſays or chapters on theſe ſubjects being already written, if I am favoured with a tolerable degree of health, will be put to the preſs, when the favourable acceptance of this *firſt part* ſhall give ſufficient encouragement to proceed.

THE

THE IMPROVEMENT OF THE MIND.

The First PART.

Directions for the Attainment of uſeful Knowledge.

INTRODUCTION.

NO man is obliged to learn and know every thing; this can neither be ſought nor required, for it is utterly impoſſible: yet all perſons are under ſome obligation *to improve their own underſtanding*, otherwiſe it will be a barren deſart, or a foreſt overgrown with weeds and brambles. Univerſal ignorance or

infinite errors will overſpread the mind, which is utterly neglected and lies without any cultivation.

SKILL in the ſciences is indeed the buſineſs and profeſſion but of a ſmall part of mankind; but there are many others placed in ſuch an exalted rank in the world, as allows them much leiſure and large opportunities to cultivate their reaſon, and to beautify and enrich their minds with various knowledge. Even the lower orders of men have particular callings in life, wherein they ought to acquire a juſt degree of ſkill, and this is not to be done well without thinking and *reaſoning* about them.

THE common duties and benefits of ſociety, which belong to every man living, as we are ſocial creatures, and even our native and neceſſary relations to a family, a neighbourhood, or a government, oblige all perſons whatſoever to uſe their *reaſoning powers* upon a thouſand occaſions; every hour of life calls for ſome regular exerciſe of our judgment as to times and things, perſons and actions; without a prudent and diſcreet determination in matters before us, we ſhall be plunged into perpetual errors in our conduct. Now that which ſhould always be practiſed, muſt at ſome time be learnt.

BESIDES, every ſon and daughter of *Adam* has a moſt important concern in the affairs of a life to come, and therefore it is a matter of the higheſt moment for every one to underſtand, to judge, and to reaſon right about the things of religion. It is in vain for any to ſay, *we have no leiſure or time for it.* The daily intervals of time, and vacancies from neceſſary labour, together with the one day in ſeven in the *Chriſtian* world, allows ſufficient time for this, if men would but apply themſelves to it with half as much zeal and diligence as they do to the trifles and amuſements of this life; and it would turn to infinitely better account.

THUS it appears to be the neceſſary duty and the intereſt of every perſon living to *improve his underſtanding*, to *inform his judgment*, to *treaſure up uſeful knowledge*, and to *acquire the ſkill of good reaſoning*, as far as his ſtation, capacity and circumſtances furniſh him with proper means for it. Our miſtakes in judgment may plunge us into much folly and guilt in practice. By acting without thought or reaſon, we diſhonour the *God* that made us reaſonable creatures, we often become injurious to our *neighbours*, *kindred or friends*, and we bring ſin and miſery upon *ourſelves:* For we are accountable to God our judge for every part of our irregular and miſtaken

conduct, where he hath given us ſufficient advantages to guard againſt thoſe miſtakes.

It is the deſigh of *Logic* to give this improvement to the mind, and to teach us the *right uſe of reaſon in the acquirement and communication of all uſeful knowledge:* though the greateſt part of writers on that ſubject have turned it into a compoſition of hard words, trifles and ſubtilties for the mere uſe of the ſchools, and that only to amuſe the minds and the ears of men with empty ſounds, which flatter their vanity, and puff up their pride with a pompous and glittering ſhew of falſe learning; and thus they have perverted the great and valuable deſign of that ſcienee.

A few modern writers have endeavoured to recover the honour of *Logic*, ſince that excellent author of the *Art of Thinking* led the way: among the reſt I have preſumed to make an attempt of the ſame kind, in a treatiſe publiſhed ſeveral years ago, wherein it was my conſtant aim to aſſiſt the reaſoning powers of every rank and order of men, as well as to keep an eye to the beſt intereſt of the ſchools and the candidates of true learning. There I have endeavoured to ſhew the *miſtakes* we are expoſed to in our *conception*, *judgment* and *reaſoning*; and pointed to the various *ſprings* of them. I have alſo laid down

many *general and particular rules* how to eſcape error, and attain truth in matters of the civil and religious life, as well as in the ſciences.

BUT there are ſeveral other *obſervations* very pertinent to this purpoſe, which have not fallen ſo directly under any of thoſe heads of diſcourſe, or at leaſt they would have ſwelled that treatiſe to an improper ſize; and therefore I have made a diſtinct collection of them here out of various authors, as well as from my own obſervation, and ſet them down under the following heads.

THE learned world who has done ſo much unmerited honour to that *logical* treatiſe, as to receive it into our two flouriſhing univerſities, may poſſibly admit this as a *ſecond part* or *ſupplement* to that treatiſe. And I may venture to perſuade myſelf, that if the common and the buſy ranks of mankind, as well as the ſcholar and the gentleman, would but tranſcribe ſuch rules into their underſtanding, and practiſe them, upon all occaſions, there would be much more *truth* and *knowledge* found among men; and it is reaſonable to hope that *juſtice*, *virtue* and *goodneſs* would attend as the happy conſequents.

CHAP. I.

General RULES *for the Improvement of* KNOWLEDGE*.

I. *Rule.* DEEPLY poſſeſs your mind with the *vaſt importance of a good judgment*, and the rich and ineſtimable advantage of *right reaſoning*. Review the Inſtances of your own miſconduct in Life; think ſeriouſly with yourſelves how many follies and ſorrows you had eſcaped, and how much guilt and miſery you had prevented, if from your early years you had but taken due pains to judge aright concerning perſons, times and things. This will awaken you with lively vigour to addreſs yourſelves to the work of improving your reaſoning powers, and ſeizing every opportunity and advantage for that end.

II. *Rule.* CONSIDER *the weakneſſes, frailties and miſtakes of human nature* in general, which ariſe from the very *conſtitution*

* Though the moſt of theſe following rules are chiefly addreſſed to thoſe whom their fortune or their ſtation require to addict themſelves to the peculiar improvement of their minds in greater degrees of knowledge, yet every one who has leiſure and opportunity to be acquainted with ſuch writings as theſe, may find ſomething among them for their own uſe.

tution of a ſoul united to an animal body, and ſubjected to many inconveniencies thereby. Conſider the many additional weakneſſes, miſtakes and frailties which are derived from our *original apoſtacy and fall from a ſtate of innocence*; how much our powers of underſtanding are yet more darkened, enfeebled, and impoſed upon by our ſenſes, our fancies, and our unruly paſſions, *&c.* Conſider the *depth and difficulty of many truths*, and the *flattering appearances of falſhood*, whence ariſes an infinite variety of dangers to which we are expoſed in our judgment of things. Read with greedineſs thoſe authors that treat of the doctrine of *prejudices*, *prepoſſeſſions* and *ſprings* of error, on purpoſe to make your ſoul watchful on all ſides, that it ſuffer not itſelf as far as poſſible to be impoſed upon by any of them. *See* more on this ſubject, *Logic* Part II. Chap. 3. and Part III. Chap. 3.

III. *Rule.* A SLIGHT VIEW of things ſo momentous is not ſufficient. You ſhould therefore contrive and practiſe ſome *proper methods to acquaint yourſelf with your own ignorance*, and to impreſs your mind with a deep and painful ſenſe of the low and imperfect degrees of your preſent knowledge, that you may be incited with labour and activity to purſue after greater meaſures. Among others you may find ſome ſuch *methods* as theſe ſucceſsful.

1. TAKE a wide ſurvey now and then of the vaſt and unlimited regions of learning. Let your meditations run over the names of all the ſciences, with their numerous branchings, and innumerable particular themes of knowledge; and then reflect how few of them you are acquainted with in any tolerable degree. The moſt learned of mortals will never find occaſion to act over again what is fabled of *Alexander the Great*, that when he had conquered what was called the *Eaſtern World*, he wept for want of more worlds to conquer. The worlds of ſcience are immenſe and endleſs.

2. THINK what a numberleſs *variety of queſtions* and *difficulties* there are belonging even to that *particular ſcience*, in which you have made the greateſt progreſs, and how few of them there are in which you have arrived at a final and undoubted certainty; excepting only thoſe queſtions in the pure and *ſimple mathematics*, whoſe theorems are demonſtrable and leave ſcarcely any doubt; and yet even in the purſuit of ſome few of theſe, mankind have been ſtrangely bewildered.

3. SPEND a few thoughts ſometimes on the puzzling enquiries concerning *vacuums* and *atoms*, the *doctrine of infinites*, *indiviſibles* and *incommenſurables* in geometry, wherein there appear ſome inſolvable difficulties:

culties: do this on purpoſe to give you a more ſenſible impreſſion of the poverty of your underſtanding, and the imperfection of your knowledge. This will teach you what a vain thing it is to fancy that you know all things; and will inſtruct you to think modeſtly of your preſent attainments, when every *duſt of the earth* and every *inch of empty ſpace* ſurmounts your underſtanding and triumphs over your preſumption. *Arithmo* had been bred up to accounts all his life, and thought himſelf a complete maſter of *numbers*. But when he was puſhed hard to give the ſquare root of the number 2, he tried at it, and laboured long in milleſimal fractions, until he confeſſed there was no end of the enquiry; and yet he learnt ſo much modeſty by this perplexing queſtion, that he was afraid to ſay, *it was an impoſſible thing*. It is ſome good degree of improvement when we are afraid to be poſitive.

4. READ the accounts of thoſe *vaſt treaſures of knowledge*, which ſome of the *dead* have poſſeſſed, and ſome of the *living* do poſſeſs. Read and be aſtoniſhed at the almoſt incredible advances which have been made in ſcience. Acquaint yourſelves with ſome *perſons of great learning*, that by converſe among them, and comparing yourſelves with them, you may acquire a mean opinion of your own attainments, and

and may be thereby animated with new zeal, to equal them as far as poſſible, or to exceed: thus let your diligence be quickned by a generous and laudable emulation. If *Vanillus* had never met with *Scitorio* and *Polydes*, he had never imagined himſelf a mere novice in Philoſophy, nor ever ſet himſelf to ſtudy in good earneſt.

REMEMBER this, that if upon ſome few ſuperficial acquirements you value, exalt and ſwell yourſelf as tho' you were a *man of learning* already, you are thereby building a moſt unpaſſable barrier againſt all improvement; you will lie down and indulge idleneſs, and reſt yourſelf contented in the midſt of deep and ſhameful ignorance. *Multi ad ſcientiam perveniſſent ſi ſe illuc perveniſſe non putaſſent.*

IV. *Rule.* PRESUME not too much upon a *bright genius*, a *ready wit*, and *good parts*, for this without labour and ſtudy will never make a man of knowledge and wiſdom. This has been an unhappy temptation to perſons of a vigorous and gay fancy to deſpiſe learning and ſtudy. They have been acknowledged to ſhine in an aſſembly, and ſparkle in diſcourſe upon common topics, and thence they took it into their heads to abandon reading and labour, and grow old in ignorance; but when they had loſt the vivacities of animal nature and youth, they became ſtupid

pid and ſottiſh even to contempt and ridicule. *Lucidas* and *Scintillo* are young men of this ſtamp: they ſhine in converſation, they ſpread their native riches before the ignorant; they pride themſelves in their own lively images of fancy, and imagine themſelves wiſe and learned; but they had beſt avoid the *preſence of the ſkilful* and the *teſt of reaſoning*; and I would adviſe them once a day to think forward a little, what a contemptible figure they will make in age.

THE witty men ſometimes have ſenſe enough to know their own *foible*, and therefore they craftily ſhun the attacks of argument, or boldly pretend to deſpiſe and renounce them; becauſe they are conſcious of their own ignorance, and inwardly confeſs their want of acquaintance with the *ſkill of reaſoning*.

V. *Rule.* As you are not to fancy yourſelf a *learned man* becauſe you are bleſſed with a *ready wit*, ſo neither muſt you imagine that *large and laborious reading*, and a *ſtrong memory*, can denominate you *truly wiſe*.

WHAT that excellent critic has determined when he decided the queſtion, whether wit or ſtudy makes the beſt poet, may well be applied to every ſort of learning——

——*Ego*

——*Ego nec ſtudium ſine divite venâ*
Ne crude quid profit, video, ingenium: alterius
ſic
Altera poſcit opem res, & conjurat amicè.

Hor. de Art. Poet.

Thus made Engliſh;

Concerning *poets* there has been conteſt,
Whether they're made by *art*, or *nature* beſt:
But if I may preſume in this affair,
Among the reſt my judgment to declare,
No *art* without a genius will avail,
And *parts* without the help of *art* will fail;
But both ingredients jointly muſt unite,
Or verſe will never ſhine with a tranſcendent light. Oldham.

IT is meditation and ſtudious thought, it is the exerciſe of your own reaſon and judgment upon all you read, that gives good ſenſe even to the beſt genius, and affords your underſtanding the trueſt improvement. A boy of ſtrong memory may repeat a whole book of *Euclid*, yet be no *Geometrician*; for he may not be able perhaps to demonſtrate one ſingle theorem. *Memorino* has learnt half the bible by heart, and is become a living concordance and a ſpeaking index to theological folios, and yet he underſtands little of divinity.

A well

A well furniſhed library and a capacious memory, are indeed of ſingular uſe toward the improvement of the mind; but if all your learning be nothing elſe but a mere amaſſment of what others have written, without a due penetration into their meaning, and without a judicious choice and determination of your own ſentiments, I do not ſee what title your *head* has to true learning above your *ſhelves*. Though you have read *Philoſophy* and *Theology*, *Morals*, and *Metaphyſics* in abundance, and every other art and ſcience, yet if your *memory* is the only faculty employed, with the neglect of your *reaſoning powers*, you can juſtly claim no higher character but that of a *good hiſtorian of the ſciences*.

HERE *note*, Many of the *foregoing advices* are more peculiarly proper for thoſe who are conceited of their abilities, and are ready to entertain a high opinion of themſelves. But a modeſt humble youth of a good genius, ſhould not ſuffer himſelf to be diſcouraged by any of theſe conſiderations. They are deſigned only as a ſpur to diligence, and a guard againſt vanity and pride.

VI. *Rule*. Be not ſo weak as to imagine that a *life of learning* is a *life of lazineſs and eaſe*: dare not give up yourſelf to any of the learned profeſſions unleſs you are reſolved to *labour hard at ſtudy*, and can make

make it your delight and the joy of your life, according to the motto of our late Lord Chancellor *King*.

Labor ipſe voluptas.

IT is no idle thing to be a *ſcholar indeed*. A man much addicted to luxury and pleaſure, recreation and paſtime, ſhould never pretend to devote himſelf entirely to the ſciences, unleſs his ſoul be ſo reformed and refined that he can taſte all theſe entertainments eminently in his cloſet, among his books and papers. *Sobrino* is a temperate man and a philoſopher, and he feeds upon partridge and pheaſant, veniſon and ragoûts, and every delicacy, in a growing underſtanding, and a ſerene and healthy ſoul, though he dines on a diſh of ſprouts or turnips. *Languinos* loved his eaſe, and therefore choſe to be brought up a ſcholar; he had much indolence in his temper, and as he never cared for ſtudy, he falls under univerſal contempt in his profeſſion, becauſe he has nothing but the gown and the name.

VII. LET the hope of new diſcoveries, as well as the ſatisfaction and pleaſure of known truths, animate your daily induſtry. *Do not think learning in general is arrived at its perfection*, or that the knowledge of any particular ſubject in any ſcience cannot be improved, merely becauſe it has lain five hundred or a thouſand years without im-

improvement. The preſent age, by the bleſſing of God on the ingenuity and diligence of men, has brought to light ſuch truths in natural philoſophy, and ſuch diſcoveries in the heavens and the earth, as ſeemed to be beyond the reach of man. But may not there be Sir *Iſaac Newtons* in every ſcience? You ſhould never deſpair therefore of finding out that which has never yet been found, unleſs you ſee ſomething in the nature of it which renders it unſearchable, and above the reach of our faculties.

Nor ſhould a ſtudent in divinity imagine that our age is arrived at a full underſtanding of every thing which can be known by the ſcriptures. Every age ſince the reformation hath thrown ſome further light on difficult texts and paragraphs of the bible, which have been long obſcured by the early riſe of antichriſt: and ſince there are at preſent many difficulties, and darkneſſes hanging about certain truths of the Chriſtian Religion, and ſince ſeveral of theſe relate to important doctrines, ſuch as the *Origin of Sin*, the *Fall of Adam*, the *Perſon of Chriſt*, the *Bleſſed Trinity*, and the *Decrees of God*, &c. which do ſtill embarraſs the minds of honeſt and enquiring readers, and which make work for noiſy controverſy: it is certain there are ſeveral things in the bible yet unknown and not ſufficiently

ently explained, and it is certain that there is ſome way to ſolve theſe difficulties, and to reconcile theſe ſeeming contradictions. And why may not a ſincere ſearcher of truth in the preſent age, by labour, diligence, ſtudy, and prayer, with the beſt uſe of his reaſoning powers, find out the proper ſolution of thoſe knots and perplexities which have hitherto been unſolved, and which have afforded matter for angry quarrelling? Happy is every man who ſhall be favoured of Heaven, to give a helping hand towards that introduction of the bleſſed age of light and love.

VIII. *Do not hover always on the ſurface of things*, nor take up ſuddenly with mere appearances; but penetrate into the depth of matters, as far as your time and circumſtances allow, eſpecially in thoſe things which relate to your own profeſſion. Do not indulge yourſelves to judge of things by the firſt glimpſe, or a ſhort and ſuperficial view of them; for this will fill the mind with errors and prejudices, and give it a wrong turn and ill habit of thinking, and make much work for retraction. *Subito* is carried away with title pages, ſo that he ventures to pronounce upon a large *octavo* at once, and to recommend it wonderfully when he had read half the Preface. Another volume of controverſies of equal ſize, was diſcarded by him at once, becauſe it pretended to treat of the *Trinity*, and yet he

he could neither find the word *eſſence* nor *ſubſiſtencies* in the 12 firſt pages: but *Subito* changes his opinions of men and books and things ſo often, that nobody regards him.

As for thoſe ſciences, or thoſe parts of knowledge, which either your profeſſion, your leiſure, your inclination, or your incapacity, forbid you to purſue with much application, or to ſearch far into them, you muſt be contented with an *hiſtorical* and *ſuperficial knowledge* of them, and not pretend to form many judgments of your own on thoſe ſubjects which you underſtand very imperfectly.

IX. Once a day, eſpecially in the early years of life and ſtudy, *call yourſelves to an account what new ideas, what new propoſition or truth you have gained, what further confirmation of known truths, and what advances you have made in any part of knowledge*; and let no day if poſſible paſs away without ſome intellectual gain: ſuch a courſe well purſued, muſt certainly advance us in uſeful knowledge. It is a wiſe proverb among the learned, borrowed from the lips and practice of a celebrated painter, *nulla dies ſine lineâ*; let no day paſs without one line at leaſt: and it was a ſacred rule among the *Pythagoreans*, that they ſhould every evening thrice run over the actions and affairs of the day, and examine what their conduct hath been, what

they had done, or what they have neglected; and they assured their pupils, that by this method they would make a noble progress in the path of virtue.

Μηδ' υπνον μαλακοισιν επ' ομμασι προσδεξασθαι
Πριν των ημερινων εργων τρις εκαστον επελθειν.
Πη παρεβην; τι δ' ερεξα; τι μοι δεον ουκ ετελεσθη;
Ταυτα σε της θειης αρετης εις ιχνια θησει.

Nor let ſoft ſlumber cloſe your eyes
Before you've recollected thrice
The train of actions thro' the day:
Where have my feet choſe out the way?
What have I learnt, where'er I've been,
From all I've heard, from all I've ſeen?
What know I more that's worth the know-
ing?
What have I done that's worth the doing?
What have I ſought that I ſhould ſhun?
What duty have I left undone;
Or into what new follies run?
Theſe ſelf-enquiries are the road
That leads to virtue and to God.

I WOULD be glad among a nation of *Chriſtians*, to find young men heartily engaged in the practice of what this *heathen* writer teaches.

X. MAINTAIN a conſtant watch at all times againſt a *dogmatical ſpirit*: fix not your

your aſſent to any propoſition in a firm and unalterable manner, till you have ſome firm and unalterable ground for it, and till you have arrived at ſome clear and ſure evidence; till you have turned the propoſition on all ſides, and ſearched the matter through and through, ſo that you cannot be miſtaken. And even where you may think you have full grounds of aſſurance, be not too early, nor too frequent in expreſſing this aſſurance in too peremptory and poſitive a manner, remembering that human nature is always liable to miſtake in this corrupt and feeble ſtate. A *dogmatical ſpirit* has many inconveniencies attending it: as,

1. *It ſtops the ear againſt all further reaſoning* upon that ſubject, and ſhuts up the mind from all farther improvements of knowledge. If you have reſolutely fixed your opinion, though it be upon too ſlight and inſufficient grounds, yet you will ſtand determined to renounce the ſtrongeſt reaſon brought for the contrary opinion, and grow obſtinate againſt the force of the cleareſt argument. *Poſitivo* is a man of this character, and has often pronounced his aſſurance of the *Carteſian* vortexes: laſt year ſome further light broke in upon his underſtanding, with uncontrollable force, by reading ſomething of mathematical philoſophy; yet having aſſerted his former opinions in a moſt confident manner, he is tempt-

ed now to wink a little againſt the truth, or to prevaricate in his diſcourſe upon that ſubject, leſt by admitting conviction, he ſhould expoſe himſelf to the neceſſity of confeſſing his former folly and miſtake; and he has not humility enough for that.

2. A *dogmatical ſpirit* naturally leads us to *arrogance* of *mind*, and gives a man ſome airs in converſation, which are too haughty and aſſuming. *Audens* is a man of learning, and very good company, but his infallible aſſurance renders his carriage ſometimes inſupportable.

3. A *dogmatical ſpirit* inclines a man to be *cenſorious of his neighbours*. Every one of his opinions appears to him written as it were with ſun-beams, and he grows angry that his neighbour does not ſee it in the ſame light. He is tempted to diſdain his correſpondents as men of a low and dark underſtanding, becauſe they will not believe what he does. *Furio* goes farther in this wild track, and charges thoſe who refuſe his notions, with wilful obſtinacy and vile hypocriſy; he tells them boldly, that they reſiſt the truth, and ſin againſt their conſciences.

THESE are the men, that when they deal in controverſy, delight in reproaches. They abound in toſſing about *abſurdity* and *ſtupidity* among their brethren: they caſt the imputation of *hereſy* and *nonſenſe* plenti-

plentifully upon their antagoniſts; and in matters of ſacred importance, they deal out their *anathemas* in abundance upon chriſtians better than themſelves; they denounce damnation upon their neighbours without either juſtice or mercy, and when they pronounce ſentences of divine wrath againſt ſuppoſed heretics, they add their own human fire and indignation. A dogmatiſt in religion is not a great way off from a bigot, and is in high danger of growing up to be a bloody perſecutor.

XI. Though caution and ſlow aſſent will guard you againſt frequent miſtakes and retractions, yet you ſhould *get humility and courage enough to retract any miſtake, and confeſs an error:* frequent changes are tokens of levity, in our firſt determinations; yet you ſhould never be too proud to change your opinion, nor frighted at the name of a *changeling*. Learn to ſcorn thoſe vulgar *bugbears* which confirm fooliſh man in his own miſtakes, for fear of being charged with inconſtancy. I confeſs it is better not to judge, than to judge falſly; and it is wiſer to with-hold our aſſent till we ſee complete evidence; but if we have too ſuddenly given our aſſent, as the wiſeſt man does ſometimes, if we have profeſſed what we find afterwards to be falſe, we ſhould never be aſhamed nor afraid to renounce a miſtake. That is a noble eſſay

that is found among the *Occaſional Papers*, to encourage the world to practiſe *retractions*; and I would recommend it to the peruſal of every ſcholar and every chriſtian.

XII. HE that would raiſe his judgment above the vulgar rank of mankind, and learn to paſs a juſt ſentence on perſons and things, muſt *take heed of a fanciful temper of mind, and a humorous conduct in his affairs.* Fancy and humour early and conſtantly indulged, may expect an old age over-run with follies.

THE notion of a *humouriſt* is, one that is greatly pleaſed or greatly diſpleaſed with little things, who ſets his heart much upon matters of very ſmall importance, who has his will determined every day by trifles, his actions ſeldom directed by the reaſon and nature of things, and his paſſions frequently raiſed by things of little moment. Where this practice is allowed, it will inſenſibly warp the judgment to pronounce little things great, and tempt you to lay a great weight upon them. In ſhort, this temper will incline you to paſs an unjuſt value on almoſt every thing that occurs; and every ſtep that you take in this path is juſt ſo far out of the way to wiſdom.

XIII. FOR the ſame reaſon *have a care of trifling with things important and momentous*, or of *ſporting with things awful and ſacred:*

ſacred: do not indulge a ſpirit of ridicule, as ſome witty men do on all occaſions and ſubjects. This will as unhappily bias the judgment on the other ſide, and incline you to paſs a low eſteem on the moſt valuable objects. Whatſoever evil habit we indulge in practice, it will inſenſibly obtain a power over our underſtanding, and betray us into many errors. *Jocander* is ready with his jeſt to anſwer every thing that he hears; he reads books in the ſame jovial humour, and has got the art of turning every thought and ſentence into merriment. How many awkward and irregular judgments does this man paſs upon ſolemn ſubjects, even when he deſigns to be grave and in earneſt? his mirth and laughing humour is formed into habit and temper, and leads his underſtanding ſhamefully aſtray. You will ſee him wandering in purſuit of a gay flying feather, and he is drawn by a ſort of *ignis fatuus* into bogs and mire almoſt every day of his life.

XIV. EVER *maintain a virtuous and pious frame of ſpirit*; for an indulgence of vicious inclinations debaſes the underſtanding, and perverts the judgment. *Whoredom and wine and new wine, take away the heart* and ſoul and reaſon of a man. Senſuality ruins the better faculties of the mind: an indulgence to appetite and paſſion enfeebles the powers of reaſon, it

makes the judgment weak and ſuſceptive of every falſehood, and eſpecially of ſuch miſtakes as have a tendency towards the gratification of the animal; and it warps the ſoul aſide ſtrangely from that ſteadfaſt honeſty and integrity that neceſſarily belongs to the purſuit of truth. It is the virtuous man who is in a fair way to wiſdom. *God gives to thoſe that are good in his ſight, wiſdom, and knowledge, and joy,* Eccl. ii. 26.

PIETY towards God, as well as ſobriety and virtue, are neceſſary qualifications to make a truly wiſe and judicious man. He that abandons religion muſt act in ſuch a contradiction to his own conſcience and beſt judgment, that he abuſes and ſpoils the faculty itſelf. It is thus in the nature of things, and it is thus by the righteous judgment of God: even the pretended ſages among the *heathens, who did not like to retain God in their knowledge, they were given up to a reprobate mind,* εις νουν αδοκιμον, an undiſtinguiſhing or injudicious mind, ſo that they judged inconſiſtently, and practiſed mere abſurdities, τα μη ανηκοντα, Rom. i. 28.

AND it is the character of the ſlaves of *antichriſt,* 2 Theſſ. ii. 10. *&c.* that thoſe *who receive not the love of the truth, were expoſed to the* power of diabolical ſleights and *lying wonders.* When divine revelation ſhines and blazes in the face of men with glorious evidence, and they wink their eyes againſt

againſt it, the God of this world is ſuffered to blind them even in the moſt obvious, common, and ſenſible things. The great God of heaven for this cauſe, *ſends them ſtrong deluſions that they ſhould believe a lye*; and the nonſenſe of *tranſubſtantiation* in the *popiſh world* is a moſt glaring accompliſhment of this prophecy, beyond ever what could have been thought of or expected among creatures who pretend to reaſon.

XV. *WATCH againſt the pride of your own reaſon*, and a vain conceit of your own intellectual powers, with the neglect of divine aid and bleſſing. Preſume not upon great attainments in knowledge by your own ſelf-ſufficiency: thoſe who *truſt to their own underſtanding* entirely, are pronounced *fools* in the word of God; and it is the wiſeſt of men gives them this character, *he that truſteth in his own heart is a fool*, Prov. xxviii. 26. And the ſame divine writer adviſes us to *truſt in the Lord with all our heart, and not to lean to our own underſtandings*, nor to be *wiſe in our own eyes*, Chap. iii. 5, 7.

THOSE who with a neglect of religion, and dependence on God, apply themſelves to ſearch out every article in the things of God by the mere dint of their own reaſon, have been ſuffered to run into wild exceſſes of foolery, and ſtrange extravagance of opinions.

opinions. Every one who purſues this vain courſe, and will not aſk for the conduct of God in the ſtudy of religion, has juſt reaſon to fear he ſhall be left of God, and given up a prey to a thouſand prejudices: that he ſhall be conſigned over to the follies of his own heart, and purſue his own temporal and eternal ruin. And even in common ſtudies, we ſhould by humility and dependence engage the God of truth on our ſide.

XVI. OFFER up therefore your *daily requeſts to God the Father of lights*, that he would bleſs all your attempts and labours in reading, ſtudy and converſation. Think with yourſelf, how eaſily and how inſenſibly by one turn of thought he can lead you into a large ſcene of uſeful ideas: he can teach you to lay hold on a clue which may guide your thoughts with ſafety and eaſe through all the difficulties of an intricate ſubject. Think how eaſily the Author of your beings can direct your motions by his providence, ſo that the glance of an eye, or a word ſtriking the ear, or a ſudden turn of the fancy, ſhall conduct you to a train of happy ſentiments. By his ſecret and ſupreme method of government he can draw you to read ſuch a treatiſe, or to converſe with ſuch a perſon who may give you more light into ſome deep ſubject in an hour, than

than you could obtain by a month of your own ſolitary labour.

THINK with yourſelf, with how much eaſe the God of ſpirits can caſt into your mind ſome uſeful ſuggeſtion, and give a happy turn to your now thoughts, or the thoughts of thoſe with whom you converſe, whence you may derive unſpeakable light and ſatisfaction in a matter that has long puzzled and entangled you: he can ſhew you a *path which the vulture's eye has not ſeen*, and lead you by ſome unknown gate or portal, out of a wilderneſs and labyrinth of difficulties wherein you have been long wandering.

IMPLORE conſtantly his divine grace to point your inclination to proper ſtudies, and to fix your heart there. He can keep off temptations on the right hand and on the left, both by the courſe of his providence, and by the ſecret and inſenſible intimations of his Spirit. He can guard your underſtanding from every evil influence of error, and ſecure you from the danger of evil books and men, which might otherwiſe have a fatal effect, and lead you into pernicious miſtakes.

NOR let this ſort of advice fall under the cenſure of the godleſs and prophane, as a mere piece of bigotry or enthuſiaſm derived from faith and the Bible: for the reaſons which I have given to ſupport this

pious practice of invoking the bleſſing of God on our ſtudies, are derived from the light of nature as well as revelation. He that made our ſouls and is the Father of ſpirits, ſhall he not be ſuppoſed to have a moſt friendly influence towards the inſtruction and government of them? The Author of our rational powers can involve them in darkneſs when he pleaſes by a ſudden diſtemper, or he can abandon them to wander into dark and fooliſh opinions when they are filled with a vain conceit of their own light. He expects to be acknowledged in the common affairs of life, and he does as certainly expect it in the ſuperior operations of the mind, and in the ſearch of knowledge and truth. The very *Greek heathens* by the light of reaſon were taught to ſay, Εκ Διος αρχομεσθα, and the *Latins*, *A Jove principium, muſæ.* In the works of learning they thought it neceſſary to begin with God. Even the poets call upon the *muſe* as a goddeſs to aſſiſt them in their compoſitions.

THE firſt lines of *Homer* in his *Iliad* and his *Odyſſey*, the firſt line of *Muſæus* in his ſong of *Hero* and *Leander*, the beginning of *Heſiod* in his poem of *Works and Days*, and ſeveral others, furniſh us with ſufficient examples of this kind; nor does *Ovid* leave out this piece of devotion as he begins his ſtories of the *Metamorphoſis*. *Chriſtianity* ſo much

much the more obliges us by the precepts of Scripture to invoke the aſſiſtance of the true God in all our labours of the mind, for the improvement of ourſelves and others. Biſhop *Saunderſon* ſays, that *ſtudy without prayer is atheiſm*, as well as that *prayer without ſtudy is preſumption*. And we are ſtill more abundantly encouraged by the teſtimony of thoſe who have acknowledged from their own experience, that ſincere prayer was no hindrance to their ſtudies: they have gotten more knowledge ſometimes upon their knees, than by their labour in peruſing a variety of authors; and they have left this obſervation for ſuch as follow, *Bene orâſſe eſt bene ſtuduiſſe*. Praying is the beſt ſtudying.

To conclude, let induſtry and devotion join together, and you need not doubt the happy ſucceſs, *Prov.* ii. 2. *Incline thine ear to wiſdom, apply thine heart to underſtanding: cry after knowledge, and lift up thy voice; ſeek her as ſilver, and ſearch for her as for hidden treaſures; then ſhalt thou underſtand the fear of the Lord*, &c. which is *the beginning of wiſdom. It is the Lord who gives wiſdom* even to *the ſimple*, and *out of his mouth cometh knowledge and underſtanding*.

CHAP.

CHAP. II.

Obſervation, Reading, Inſtruction by Lectures, Converſation, and Study compared.

THERE are *five eminent means or methods* whereby the mind is improved in the knowledge of things, and theſe are *obſervation*, *reading*, *inſtruction* by *lectures*, *converſation*, and *meditation*; which laſt in a moſt peculiar manner is called *ſtudy*.

LET us ſurvey the general *definitions* or *deſcriptions* of them all.

I. *OBSERVATION* is the *notice that we take of all occurrences in human life, whether they are ſenſible or intellectual, whether relating to perſons or things, to ourſelves or others.* It is this that furniſhes us even from our infancy, with a rich variety of ideas and propoſitions, words and phraſes: it is by this we know that *fire will burn*, that the *ſun gives light*, that a *horſe eats graſs*, that an *acorn produces an oak*, that *man is a being capable of reaſoning and diſcourſe*, that *our judgment is weak*, that *our miſtakes are many*, that *our ſorrows are great*, that *our bodies die and are carried to the grave*, and that *one generation ſucceeds another*. *All thoſe* things which we ſee, which we hear

or

or feel, which we perceive by ſenſe or conſciouſneſs, or which we know in a direct manner, with ſcarcely any exerciſe of our reflecting faculties or our reaſoning powers, may be included under the general name of *obſervation*.

WHEN this *obſervation* relates to any thing that immediately concerns ourſelves, and of which we are conſcious, it may be called *experience*. So I am ſaid to know or experience, that *I have in myſelf a power of thinking, fearing, loving*, &c. that *I have appetites and paſſions* working in me, and *many perſonal occurences* have attended me in this life.

Obſervation therefore includes all that Mr. *Locke* means by *ſenſation* and *reflection*.

WHEN we are ſearching out the nature or properties of any being, by various methods of trial; or when we apply ſome active powers or ſet ſome cauſes at work, to *obſerve* what effects they would produce, this ſort of *obſervation* is called *experiment*. So when I throw *a bullet into water*, I find it *ſinks:* and when I throw the ſame *bullet into quickſilver*, I ſee it *ſwims:* but if I beat out *this bullet into a thin hollow ſhape* like a diſh, then it will *ſwim in the water* too. So when I ſtrike two flints together, I find they produce fire: when I throw a *ſeed into the earth*, it *grows up into a plant*.

ALL theſe belong to the firſt method of knowledge, which I call *obſervation*.

II. *READING* is that means or method of knowledge, whereby *we acquaint ourſelves with what other men have written or publiſhed to the world in their writings*. Theſe arts of *reading* and *writing* are of infinite advantage; for by them we are made partakers of the ſentiments, obſervations, reaſonings, and improvements of all the learned world, in the moſt remote nations, and in former ages, almoſt from the beginning of mankind.

III. *PUBLIC* or *private lectures*, are ſuch *verbal inſtructions as are given by a teacher while the learners attend in ſilence*. This is the way of learning *religion* from the pulpit, or of *philoſophy* or *theology* from the profeſſor's chair, or of *mathematics* by a teacher ſhewing us various theorems or problems, *i. e.* ſpeculations or practices, by demonſtration and operation, with all the inſtruments of art neceſſary to thoſe operations.

IV. *CONVERSATION* is another method of improving our minds, wherein *by mutual diſcourſe and enquiry, we learn the ſentiments of others, as well as communicate our ſentiments to others in the ſame manner*. Sometimes indeed, though both parties ſpeak by turns, yet the advantage is only on one ſide; as, when a *teacher* and a *learner* meet

meet and diſcourſe together: but frequently the profit is mutual. Under this head of *converſation*, we may alſo rank *diſputes* of various kinds.

V. *MEDITATION* or *ſtudy* includes all thoſe *exerciſes of the mind whereby we render all the former methods uſeful for our increaſe in true knowledge and wiſdom.* It is by *meditation* we come to confirm our memory of things that paſs through our thoughts in the occurrences of life, in our own experiences, and in the obſervations we make: it is by meditation that we draw various inferences, and eſtabliſh in our minds general principles of knowledge. It is by *meditation* that we compare the various ideas which we derive from our ſenſes, or from the operations of our ſouls, and join them in propoſitions. It is by *meditation* that we fix in our memory whatſoever we learn, and form our own judgment of the truth or falſhood, the ſtrength or weakneſs of what others ſpeak or write. It is *meditation* or ſtudy that draws out long chains of argument, and ſearches and finds deep and difficult truths, which before lay concealed in darkneſs.

IT would be a needleſs thing to prove that our own ſolitary *meditations*, together with the few *obſervations* that the moſt part of mankind are capable of making, are not ſufficient of themſelves to lead us into the

attainment of any conſiderable proportion of knowledge, at leaſt in an age ſo much improved as ours is, without the aſſiſtance of *converſation* and *reading*, and other *proper inſtructions* that are to be attained in our days. Yet each of theſe five methods have their *peculiar advantages*, whereby they aſſiſt each other; and their *peculiar defects*, which have need to be ſupplied by the others aſſiſtance. Let us trace over ſome of the particular *advantages* of each.

I. ONE method of improving the mind is *obſervation*, and the *advantages* of it are theſe.

1. It is owing to *obſervation* that our *mind is furniſhed with the firſt, ſimple and complex ideas*. It is this lays the ground-work and foundation of all knowledge, and makes us capable of uſing any of the other methods for improving the mind: for if we did not attain a variety of ſenſible and intellectual ideas by the *ſenſation* of outward objects, by the *conſciouſneſs* of our own appetites and paſſions, pleaſures and pains, and by inward *experience* of the actings of our own ſpirits, it would be impoſſible either for men or books to teach us any thing. It is obſervation that muſt give us our firſt ideas of things, as it includes in it *ſenſe* and *conſciouſneſs*.

2. ALL our knowledge derived from *obſervation*, whether it be of ſingle ideas or of

of propoſitions, is *knowledge gotten at firſt hand.* Hereby we ſee and know things as they are, or as they appear to us; we take the impreſſions of them on our minds from the original objects themſelves, which give a clearer and ſtronger conception of things: theſe ideas are more lively, and the propoſitions (at leaſt in many caſes) are much more evident. Whereas what knowledge we derive from *lectures*, *reading*, and *converſation*, is but the copy of other men's ideas, that is, the picture of a picture; and it is one remove further from the original.

3. ANOTHER *advantage of obſervation* is, that we may *gain knowledge all the day long*, and every moment of our lives, and every moment of our exiſtence we may be adding ſomething to our intellectual treaſures thereby, except only while we are aſleep; and even then the remembrance of our dreamings will teach us ſome truths, and lay a foundation for a better acquaintance with human nature, both in the powers and in the frailties of it.

II. THE next way of improving the mind is by *reading*, and the *advantages of it* are ſuch as theſe.

1. By *reading* we acquaint ourſelves in a very extenſive manner *with the affairs, actions and thoughts of the living and the dead*, in the *moſt remote nations and in moſt diſtant ages*; and that with as much eaſe

as though they lived in our own age and nation. By *reading* of books we may learn ſomething from *all parts of mankind*; whereas by *obſervation* we learn all from ourſelves, and only what comes within our own direct cognizance; by *converſation* we can only enjoy the aſſiſtance of a *very few perſons*, viz. thoſe who are near us, and live at the ſame time when we do, that is, our *neighbours* and *contemporaries:* but our knowledge is much more narrowed ſtill, if we confine ourſelves merely to our own ſolitary reaſonings, without much obſervation or reading: for then all our improvement muſt ariſe only from our own inward powers and meditations.

2. By *reading* we learn not only the actions and the ſentiments of diſtant nations and ages, but we transfer to ourſelves the knowledge and improvements of the *moſt learned men, the wiſeſt and the beſt of mankind*, when or whereſoever they lived: for though many books have been written by weak and injudicious perſons, yet the moſt of thoſe books which have obtained great reputation in the world, are the products of great and wiſe men in their ſeveral ages and nations: whereas we can obtain the *converſation* and *inſtruction* of thoſe only who are within the reach of our dwelling, or our acquaintance, whether they are wiſe or unwiſe; and ſometimes that narrow

ſphere

ſphere ſcarcely affords any perſon of great eminence in wiſdom or learning, unleſs our *inſtructor* happen to have this character. And as for our own *ſtudy* and *meditations*, even when we arrive at ſome good degrees of learning, our advantage for further improvement in knowledge by them, is ſtill far more contracted than what we may derive from *reading*.

3. WHEN *we read good authors* we learn *the beſt*, the *moſt laboured and moſt refined ſentiments even of thoſe wiſe and learned men*; for they have ſtudied hard, and have committed to writing their matureſt thoughts, and the reſult of their long *ſtudy* and *experience:* whereas by *converſation*, and in ſome *lectures*, we obtain many times only the preſent thoughts of our *tutors* or *friends*, which (though they may be bright and uſeful) yet, at firſt perhaps, may be ſudden and indigeſted, and are mere hints which have riſen to no maturity.

4. IT is another advantage of *reading*, that we may *review what we have read*; we may conſult the page again and again, and meditate on it at ſucceſſive ſeaſons in our ſereneſt and retired hours, having the book always at hand: but what we obtain by *converſation* and in *lectures*, is oftentimes loſt again as ſoon as the company breaks up, or at leaſt when the day vaniſhes; unleſs we happen to have the talent of a good

memory, or quickly retire and note down what *remarkables* we have found in thoſe diſcourſes. And for the ſame reaſon, and for want of retiring and writing, many a learned man has loſt ſeveral uſeful meditations of his own, and could never recal them again.

III. THE advantages of *verbal inſtructions by public or private lectures* are theſe.

1. THERE is ſomething *more ſprightly, more delightful* and *entertaining* in the living diſcourſe of a wiſe, a learned, and well-qualified teacher, than there is in the ſilent and ſedentary practice of reading. The very turn of voice, the good pronunciation, and the polite and alluring manner which ſome teachers have attained, will engage the attention, keep the ſoul fixed, and convey and inſinuate into the mind, the ideas of things in a more lively and forcible way, than the *mere reading of books* in the ſilence and retirement of the cloſet.

2. A tutor or inſtructor, when he paraphraſes and explains other authors, can *mark out the preciſe point of difficulty or controverſy*, and unfold it. He can ſhew you which paragraphs are of greateſt importance, and which are of leſs moment. He can teach his hearers what authors, or what parts of an author, are beſt worth reading on any particular ſubject; and thus ſave

ſave his diſciples much time and pains, by ſhortening the labours of their cloſet and private ſtudies. He can ſhew you what were the doctrines of the *antients* in a *compendium*, which perhaps would coſt much labour and the peruſal of many books to attain. He can inform yon what new doctrines or ſentiments are riſing in the world, before they come to be public; as well as acquaint you with his own private thoughts, and his own experiments and obſervations; which never were, and perhaps never will be publiſhed to the world, and yet may be very valuable and uſeful.

3. A LIVING inſtructor *can convey to our ſenſes thoſe notions with which he would furniſh our minds, when he teaches us natural philoſophy*, or moſt parts of *mathematical learning*. He can make the *experiments* before our eyes. He can deſcribe *figures* and *diagrams*, point to the *lines* and *angles*, and make out the *demonſtration* in a more intelligible manner by ſenſible means, which cannot be done ſo well by mere reading, even though we ſhould have the ſame figures lying in a book before our eyes. A living teacher therefore, is a moſt neceſſary help in theſe ſtudies.

I MIGHT add alſo, that even where the ſubject of diſcourſe is *moral*, *logical* or *rhetorical*, &c. and which does not directly come under the notice of our ſenſes, a

tutor may explain his ideas by ſuch familiar examples, and plain or ſimple ſimilitudes, as ſeldom find place in books and writings.

4. WHEN an inſtructor in his lectures delivers any matter of difficulty, or expreſſes himſelf in ſuch a manner as ſeems obſcure, ſo that you do not take up his ideas clearly or fully, *you have opportunity*, at leaſt when the lecture is finiſhed, or at other proper ſeaſons, to *enquire how ſuch a ſentence ſhould be underſtood*, or *how ſuch a difficulty may be explained and removed.*

IF there be permiſſion given to free converſe with the tutor, either in the midſt of the lecture, or rather at the end of it, concerning any doubts or difficulties that occur to the hearer, this brings it very near to *converſation* or *diſcourſe*.

IV. *CONVERSATION* is the next method of improvement, and it is attended with the following *advantages*.

1. WHEN we *converſe* familiarly with a learned friend, *we have his own help at hand to explain to us every word and ſentiment that ſeems obſcure* in his diſcourſe, and to inform us of his whole meaning, ſo that we are in much leſs danger of miſtaking his ſenſe; whereas in *books*, whatſoever is really obſcure, may alſo abide always obſcure without remedy, ſince the author is not at hand, that we may enquire his ſenſe.

IF

IF we miſtake the meaning of our friend in *converſation*, we are quickly ſet right again; but in *reading* we many times go on in the ſame miſtake, and are not capable of recovering ourſelves from it. Thence it comes to paſs, that we have ſo many conteſts in all ages about the *meaning of ancient authors*, and eſpecially the *ſacred writers*. Happy ſhould we be, could we but converſe with *Moſes*, *Iſaiah*, and St. *Paul*, and conſult the prophets and apoſtles, when we meet with a difficult text? But that glorious converſation is reſerved for the ages of future bleſſedneſs.

2. WHEN we are *diſcourſing* upon any theme with a friend, *we may propoſe our doubts and objections againſt his ſentiments*, and *have them ſolved and anſwered at once*. —The difficulties that ariſe in our minds, may be removed by one enlightening word of our *correſpondent*; whereas in *reading*, if a difficulty or queſtion ariſe in our thoughts which the author has not happened to mention, we muſt be content without a preſent anſwer or ſolution of it. Books cannot ſpeak.

3. NOT only the doubts which ariſe in the mind upon any ſubject of diſcourſe, are eaſily propoſed and ſolved in *converſation*, but the very *difficulties we meet with in books and in our private ſtudies*, may find a relief by *friendly conference*. We may pore upon a knotty point in ſolitary meditation

tation many months without a ſolution, becauſeperhaps we have gotten into a wrong tract of thought; and our labour (while we are purſuing a falſe ſcent) is not only uſeleſs and unſucceſsful, but it leads us perhaps into a train of error for want of being corrected in the firſt ſtep. But if we note down this difficulty when we read it, we may propoſe it to an ingenious *correſpondent* when we ſee him; we may be relieved in a moment, and find the difficulty vaniſh: he beholds the object perhaps in a different view, ſets it before us in quite another light, and leads us at once into evidence and truth, and that with a delightful ſurpriſe.

4. *CONVERSATION calls out into light what has been lodged in all the receſſes and ſecret chambers of the ſoul:* by occaſional hints and incidents, it brings old uſeful notions into remembrance; it unfolds and diſplays the hidden treaſures of knowledge with which *reading*, *obſervation* and *ſtudy* had before furniſhed the mind. By mutual diſcourſe the ſoul is awakened and allured to bring forth its hoards of knowledge, and it learns how to render them moſt uſeful to mankind. A man of vaſt reading without converſation, is like a *miſer* who lives only to himſelf.

5. IN free and friendly *converſation* our *intellectual powers are more animated, and our ſpirits act with a ſuperior vigour in the queſt*

queſt and purſuit of unknown truths. There is a ſharpneſs and ſagacity of truth that attends *converſation*, beyond what we find whilſt we are ſhut up reading and muſing in our retirements. Our ſouls may be *ſerene* in ſolitude, but not *ſparkling*, though perhaps we are employed in reading the works of the brighteſt writers. Often has it happened in *free diſcourſe*, that new thoughts are ſtrangely ſtruck out, and the ſeeds of truth ſparkle and blaze through the company, which in calm and ſilent reading would never have been excited. By *converſation* you will both give and receive this benefit; as *flints* when put into motion and ſtriking againſt each other, produce living fire on both ſides, which would never have riſen from the ſame hard materials in a ſtate of reſt.

6. IN generous *converſation*, amongſt ingenious and learned men, we have a great advantage of propoſing our private opinions, and of *bringing our own ſentiments to the teſt*, and learning in a more compendious and a ſafer way what the world will judge of them, how mankind will receive them, what objections may be raiſed againſt them, what defects there are in our ſcheme, and how to correct our own miſtakes; which advantages are not ſo eaſy to be obtained by our own private *meditations:* for the pleaſure we take in our own notions, and the

the *paſſion of ſelf-love*, as well as the *narrowneſs* of *our own views*, tempt us to paſs too favourable an opinion on our own ſchemes; whereas the variety of *genius* in our ſeveral aſſociates, will give happy notices how our opinion will ſtand in the view of mankind.

7. IT is alſo another conſiderable advantage of *converſation*, that it furniſhes the ſtudent with the *knowledge of men* and the affairs of life, as *reading* furniſhes him with *book-learning*. A man who dwells all his days among books, may have amaſſed together a vaſt heap of notions, but he may be a *mere ſcholar*, which is a contemptible ſort of character in the world. A hermit who has been ſhut up in his cell in a college, has contracted a ſort of mould and ruſt upon his ſoul, and all his airs of behaviour have a certain awkwardneſs in them; but theſe awkward airs are worn away by degrees in company: the ruſt and the mould are filed and bruſhed off by polite converſation. The *ſcholar* now becomes a *citizen* or a *gentleman*, a *neighbour* and a *friend*; he learns how to dreſs his ſentiments in the faireſt colours, as well as to ſet them in the ſtrongeſt light. Thus he brings out his notions with honour, he makes ſome uſe of them in the world, and improves the theory by the practice.

BUT

BUT before we proceed too far in finiſhing a bright character by *converſation*, we ſhould conſider that ſomething elſe is neceſſary beſides *an acquaintance with men and books:* and therefore, I add,

V. MERE *lectures*, *reading*, and *converſation*, without *thinking*, are not ſufficient to make a man of knowledge and wiſdom. It is our own *thought* and *reflection*, *ſtudy* and *meditation*, muſt attend all the other methods of improvement, and perfect them. It carries theſe advantages with it:

1. THOUGH *obſervation* and *inſtruction*, *reading* and *converſation* may furniſh us with many ideas of men and things, yet it is *our own meditation* and the labour of our own *thoughts*, that muſt form our judgment of things. Our own thoughts ſhould join or disjoin theſe ideas in a propoſition for ourſelves: it is our own mind that *muſt judge for ourſelves concerning* the agreement or diſagreement of ideas, and form propoſitions of truth out of them. *Reading* and *converſation* may acquaint us with many *truths* and with many arguments to ſupport them, but it is our own *ſtudy* and *reaſoning* that muſt determine whether theſe propoſitions are true, and whether theſe arguments are juſt and ſolid.

IT is confeſt there are a thouſand things which our eyes have not ſeen, and which would

would never come within the reach of our perſonal and immediate *knowledge* and *obſervation*, becauſe of the diſtance of times and places: theſe muſt be known by conſulting other perſons; and that is done either in their *writings* or in their *diſcourſes*. But after all, let this be a fixed point with us, that it is our own *reflection* and *judgment* muſt determine how far we ſhould receive that which books or men inform us of, and how far they are worthy of our aſſent and credit.

2. IT *is meditation* and *ſtudy* that *tranſfers and conveys the notions and ſentiments of others to ourſelves*, ſo as to make them properly our own. It is our own *judgment* upon them as well as our *memory* of them, that makes them become *our own property*. It does as it were conduct our intellectual food, and turns it into a part of *ourſelves:* juſt as a man may call his limbs and his fleſh *his own*, whether he borrowed the materials from the ox or the ſheep, from the lark or the lobſter; whether he derived it from corn or milk, the fruits of the trees, or the herbs and roots of the earth; it is all now become one ſubſtance with himſelf, and he wields and manages thoſe muſcles and limbs for his own proper purpoſes, which once were the ſubſtance of other animals or vegetables; that very ſubſtance which laſt week was grazing in the

the field or ſwimming in the ſea, waving in the milk-pail or growing in the garden, is now become part of the man.

3. BY *ſtudy and meditation*, we *improve the hints* that we have acquired by *obſervation*, *converſation* and *reading*; we take more time in thinking, and by the labour of the mind we penetrate deeper into themes of knowledge, and carry our thoughts ſometimes much farther on many ſubjects, than we ever met with either in *the books* of the dead or *diſcourſes* of the living. It is our own *reaſoning* that draws out one truth from another, and forms a whole ſcheme of ſcience from a few hints which we borrowed elſewhere.

BY a ſurvey of theſe things we may juſtly conclude, that he who ſpends all his time in *hearing lectures*, or *poring upon books*, *without obſervation*, *meditation* or *converſe*, will have but a mere *hiſtorical knowledge of learning*, and be able only to tell what others have known or ſaid on the ſubject: he that lets all his time flow away in *converſation*, *without* due *obſervation*, *reading*, or *ſtudy*, will gain but a ſlight and ſuperficial knowledge, which will be in danger of vaniſhing with the voice of the ſpeaker: and he that confines himſelf merely to his cloſet and his own *narrow obſervation* of things, and is taught only by his own *ſolitary thoughts*, *without inſtruction*

ſtruction by lectures, reading, or free converſation, will be in danger of a narrow ſpirit, a vain conceit of himſelf, and an unreaſonable contempt of others; and after all, he will obtain but a very limited and imperfect view and knowledge of *things*, and he will ſeldom learn how to make that knowledge uſeful.

THESE *five methods of improvement* ſhould be purſued jointly, and go hand in hand, where our circumſtances are ſo happy as to find opportunity and conveniency to enjoy them all: though I muſt give my opinion, that two of them, *reading* and *meditation*, ſhould employ much more of our time than public *lectures* or *converſation* and diſcourſe. As for *obſervation* we may be always acquiring knowledge that way, whether we are alone or in company.

BUT it will be for our further improvement, if we will go over all theſe *five methods* of obtaining knowledge more diſtinctly, and more at large, and ſee what ſpecial advances in uſeful ſcience we may draw from them all.

CHAP.

CHAP. III.

Rules relating to OBSERVATION.

THOUGH *obſervation* in the ſtrict ſenſe of the word, and as it is diſtinguiſhed from *meditation* and *ſtudy*, is the firſt means of our improvement, and in its ſtricteſt ſenſe does not include in it any *reaſonings* of the mind upon the things which we *obſerve*, or *inferences* drawn from them; yet the motions of the mind are ſo exceeding ſwift, that it is hardly poſſible for a thinking man to gain *experiences* or *obſervations*, without making ſome ſecret and ſhort *reflections* upon them: and therefore in giving a few *directions* concerning this method of improvement, I ſhall not ſo narrowly confine myſelf to the *firſt mere impreſſion of objects on the mind by obſervation*; but include alſo ſome hints which relate to the firſt, moſt eaſy, and obvious *reflections* or *reaſonings* which ariſe from them.

I. LET *the enlargement of your knowledge be one conſtant view and deſign in life*; ſince *there is no time or place, no tranſactions, occurrences or engagements in life, which exclude us from this method of improving the mind.* When we are *alone*, even in darkneſs and ſilence, we may converſe with our own hearts, obſerve the working

of our own ſpirits, and reflect upon the inward motions of our own paſſions in ſome of the lateſt occurrences in life; we may acquaint ourſelves with the powers and properties, the tendencies and inclinations both of body and ſpirit, and gain a more intimate *knowledge of ourſelves*. When we are in *company*, we may diſcover ſomething more of human nature, of human paſſions and follies, and of human affairs, vices and virtues, by converſing with mankind, and obſerving their conduct. Nor is there any thing more valuable than the *knowledge of ourſelves, and the knowledge of men*, except it be the *knowledge of God* who made us, and our relation to him as our governor.

WHEN we are in the *houſe* or the *city*, whereſoever we turn our eyes, we ſee the *works of men*; when we are *abroad in the country*, we behold more of the *works of God*. The ſkies and the ground above and beneath us, and the animal and vegetable world round about us, may entertain our obſervation with ten thouſand varieties.

ENDEAVOUR therefore to *derive ſome inſtruction or improvement of the mind from every thing which you ſee or hear, from every thing which occurs in human life, from every thing within you or without you.*

FETCH

FETCH down ſome knowledge from the *clouds*, the *ſtars*, the *ſun*, the *moon*, and the *revolution of all the planets:* dig and draw up ſome valuable meditations from the *depths of the earth*, and ſearch them through the vaſt *oceans of water:* extract ſome intellectual improvements from the *minerals* and *metals*; from the wonders of nature among the *vegetables*, the *herbs*, *trees*, and *flowers*. Learn ſome leſſons from the *birds*, and the *beaſts*, and the *meaneſt inſect*. Read the wiſdom of God and his admirable contrivance in them all. Read his almighty power, his rich and various goodneſs in all the works of his hands.

FROM the *day* and the *night*, the *hours* and the *flying minutes*, learn a wiſe improvement of time, and be watchful to ſeize every opportunity to increaſe in knowledge.

FROM *the viciſſitudes and revolutions of nations and families*, and from the *various occurrences of the world*, learn the inſtability of mortal affairs, the uncertainty of life, the certainty of death. From a *coffin* and a *funeral*, learn to meditate upon your own departure.

FROM the *vices* and *follies* of others, obſerve what is hateful in them; conſider how ſuch a practice looks in another perſon, and remember that it looks as ill or

worſe in yourſelf. From the *virtues of others*, learn ſomething worthy of your imitation.

FROM the *deformity*, the *diſtreſs*, or *calamity* of others, derive leſſons of thankfulneſs to God, and hymns of grateful praiſe to your Creator, governor and benefactor, who has formed you in a better mould, and guarded you from thoſe evils. Learn alſo the ſacred leſſon of contentment in your own eſtate, and compaſſion to your neighbour under his miſeries.

FROM your *natural powers*, *ſenſations*, *judgment*, *memory*, *hands*, *feet*, &c. make this inference, that they were not given you for nothing, but for ſome uſeful employment to the honour of your Maker, and for the good of your fellow-creatures, as well as for your own beſt intereſt and final happineſs.

FROM the *ſorrows*, the *pains*, the *ſicknеſſes* and *ſufferings* that attend you, learn the evil of ſin, and the imperfection of your preſent ſtate. From *your own ſins* and *follies*, learn the patience of God toward you, and the practice of humility toward God and men.

THUS from every appearance in nature, and from every occurrence of life, you may derive *natural*, *moral*, and *religious obſervations* to entertain your minds, as well as *rules of conduct* in the affairs relating to this life, and that which is to come.

II. IN

II. IN order to furniſh the mind with a rich variety of ideas, the *laudable curioſity of young people ſhould be indulged and gratified rather than diſcouraged.* It is a very hopeful ſign in young perſons, to ſee them curious in obſerving, and inquiſitive in ſearching into the greateſt part of things that occur; nor ſhould ſuch an enquiring temper be frowned into ſilence, nor be rigorouſly reſtrained, but ſhould rather be ſatisfied by proper anſwers given to all thoſe queries.

FOR this reaſon alſo, where time and fortune allows it, young people ſhould be led into company at proper ſeaſons, ſhould be carried abroad to ſee the fields, and the woods, and the rivers, the buildings, towns and cities diſtant from their own dwelling; they ſhould be entertained with the ſight of ſtrange birds, beaſts, fiſhes, inſects, vegetables, and productions both of nature and art of every kind, whether they are the products of their own or foreign nations: and in due time, where providence gives opportunity, they may travel under a wiſe inſpector or tutor to different parts of the world for the ſame end, that they may bring home treaſures of uſeful knowledge.

III. AMONG all theſe obſervations, *write down what is more remarkable and uncommon;* reſerve theſe *remarks* in ſtore

for proper occaſions, and at proper ſeaſons take a review of them. Such a practice will give you a *habit of uſeful thinking*; this will ſecure the workings of your ſoul from running to waſte, and by this means even your looſer moments will turn to happy account both here and hereafter.

AND whatever uſeful obſervations have been made, let them be at leaſt ſome part of the ſubject of your converſation among your friends at next meeting.

LET the circumſtances or ſituations of life be what or where they will, a man ſhould never neglect this improvement which may be derived from *obſervation*. Let him travel into the *Eaſt* or *Weſt Indies*, and fulfil the duties of the military or the mercantile life there: let him rove through the earth or the ſeas for his own humour as a traveller, or purſue his diverſions in what part of the world he pleaſe as a gentleman; let proſperous or adverſe fortune call him to the moſt diſtant parts of the globe; ſtill let him carry on his knowledge and the improvement of his ſoul by wiſe *obſervations*. In due time, by this means he may render himſelf ſome way uſeful to the ſocieties of mankind.

THEOBALDINO in his younger years, viſited the foreſts of *Norway* on the account of trade and timber, and beſides his proper obſervations of the growth of trees

on

on thoſe *northern* mountains, he learnt there was a ſort of people called *Finnes* in thoſe confines which border upon *Sweden*, whoſe habitation is in the woods: and he lived afterwards to give a good account of them, and ſome of their cuſtoms, to the Royal Society for the improvement of natural knowledge. PUTEOLI was taken captive into *Turkey* in his youth, and travelled with his maſter in their holy pilgrimage to *Mecca*, whereby he became more intelligent in the forms, ceremonies, and fooleries of the *Mahometan* worſhip, than perhaps ever any *Briton* knew before; and by his manuſcripts, we are more acquainted in this laſt century with the *Turkiſh* ſacreds than any one had ever informed us.

IV. LET us *keep our minds as free as poſſible from paſſions and prejudices*, for theſe will give a wrong turn to our *obſervations* both on perſons and things. The eyes of a man in the *jaundice*, make *yellow* obſervations on every thing; and the ſoul tinctured with any *paſſion or prejudice*, diffuſes a falſe colour over the real appearances of things, and diſguiſes many of the common occurrences of life: it never beholds things in a true light, nor ſuffers them to appear as they are. Whenſoever therefore, you would make *proper obſervations*, let *ſelf* with all its influences ſtand aſide as far as poſſible; abſtract *your own intereſt* and *your*

own concern from them, and bid all friendſhips and enmities ſtand aloof and keep out of the way, in the obſervations that you make relating to perſons and things.

IF this rule were well obeyed, we ſhould be much better guarded againſt thoſe common pieces of miſconduct in the obſervations of men, *viz.* the falſe judgments of *pride* and *envy*. How ready is *envy* to mingle with the notices which we take of other perſons? How often is mankind prone to put an ill ſenſe upon the actions of their neighbours, to take a ſurvey of them in an evil poſition, and in an unhappy light? And by this means, we form a worſe opinion of our neighbours than they deſerve; while at the ſame time, *pride* and *ſelf-flattery* tempt us to make unjuſt obſervations on ourſelves in our own favour. In all the favourable judgments we paſs concerning ourſelves, we ſhould allow a little abatement on this account.

V. IN making your *obſervations on perſons*, take care of indulging that buſy curioſity which is ever enquiring into *private* and *domeſtic affairs*, with an endleſs itch of learning the ſecret hiſtory of families. It is but ſeldom that ſuch a prying curioſity attains any valuable ends; it often begets ſuſpicions, jealouſies and diſturbances in houſholds, and it is a frequent temptation to perſons to defame their neighbours. Some perſons

perſons cannot help telling what they know; a *buſy body* is moſt liable to become a *tatler* upon every occaſion.

VI. LET your *obſervation even of perſons and their conduct*, be chiefly deſigned in order to lead you to a better acquaintance with *things*, particularly with *human nature*; and to inform you what to imitate and what to avoid, rather than to furniſh out matter for the evil paſſions of the mind, or the impertinencies of diſcourſe, and reproaches of the tongue.

VII. THOUGH it may be proper ſometimes to make your *obſervations concerning* perſons as well as things, the ſubject of your diſcourſe in learned or uſeful converſation; yet what remarks you make on particular perſons, eſpecially to their diſadvantage, ſhould for the moſt part lie hid in your own breaſt, till ſome juſt and apparent occaſion, ſome neceſſary call of providence lead you to ſpeak them.

IF the character or conduct which you obſerve, be greatly culpable, it ſhould ſo much the leſs be publiſhed. You may treaſure up ſuch remarks of the follies, indecencies, or vices of your neighbours, as may be a conſtant guard againſt your practice of the ſame, without expoſing the reputation of your neighbour on that account. It is a good old rule, that *our converſation ſhould rather be laid out on things than*

than on perſons; and this rule ſhould generally be obſerved, unleſs names be concealed, whereſoever the faults or follies of mankind are our preſent theme.

OUR late archbiſhop *Tillotſon* has written a ſmall but excellent diſcourſe on *evil ſpeaking*, wherein he admirably explains, limits and applies that general apoſtolic precept, *Speak evil of no man.* Tit. iii. 2.

VIII. *BE not too haſty to erect general theories from a few particular obſervations, appearances or experiments.* This is what the *logicians* call a *falſe induction.* When general obſervations are drawn from ſo many particulars as to become certain and indubitable, theſe are jewels of knowledge comprehending great treaſure in a little room; but they are therefore to be made with the greater care and caution, leſt errors become large and diffuſive, if we ſhould miſtake in theſe *general notions.*

A HASTY determination of ſome univerſal principles, without a due ſurvey of all the particular caſes which may be included in them, is the way to lay a trap for our own underſtandings in their purſuit of any ſubject, and we ſhall often be taken captives into miſtake and falſhood. *Niveo* in his youth obſerved, that on three *Chriſtmas-days* together there fell a good quantity of ſnow, and now he hath writ it down in his almanack as part of his wiſe remarks on the

the weather, that it will always ſnow at *Chriſtmas*. *Euron* a young lad, took notice ten times that there was a ſharp froſt when the wind was in the *north-eaſt*, therefore in the middle of laſt *July* he almoſt expected it ſhould freeze, becauſe the weather-cocks ſhewed him a *north-eaſt* wind: and he was ſtill more diſappointed, when he found it a very ſultry ſeaſon. It is the ſame haſty judgment, that hath thrown ſcandal on a whole nation for the ſake of ſome culpable characters belonging to ſeveral particular natives of that country; whereas all the *Frenchmen* are not gay and airy; all the *Italians* are not jealous and revengeful; nor all the *Engliſh* over-run with the ſpleen.

CHAP. IV.

Of READING *and* BOOKS.

I. THE world is full of books, but there are multitudes which are ſo ill written they were never worthy any man's reading; and there are thouſands more which may be good in their kind, yet are worth nothing when the month or year, or occaſion is paſt for which they were written. Others may be valuable in themſelves, for ſome ſpecial purpoſe or in ſome peculiar ſcience, but are not fit to be peruſed by any but thoſe who are engaged in that particular ſcience or buſineſs. To what uſe is it for a *divine* or *phyſician*, or a *tradeſman*, to read over the huge volumes of *reports of judged caſes in the law?* or for a lawyer to learn *Hebrew* and read the *Rabbins?* It is of vaſt advantage for improvement of knowledge and ſaving time, for a young man to have the moſt proper books for his reading recommended by a judicious friend.

II. *BOOKS of importance* of any kind, and eſpecially *complete treatiſes* on any ſubject, ſhould be firſt read in a more general and curſory manner, to learn a little what the treatiſe promiſes, and what you may expect

expect from the writer's manner and ſkill. And for this end I would adviſe always that the *preface* be read, and a ſurvey taken of the *table of contents*, if there be one, before this firſt ſurvey of the book. By this means you will not only be better fitted to give the book the firſt reading, but you will be much aſſiſted in your ſecond peruſal of it, which ſhould be done with greater attention and deliberation, and you will learn with more eaſe and readineſs what the author pretends to teach. In your reading, *mark* what is new or unknown to you before, and review thoſe chapters, pages or paragraphs. Unleſs a reader has an uncommon and moſt retentive memory, I may venture to affirm, that there is ſcarcely any book or chapter worth reading once, that is not worthy of a ſecond peruſal At leaſt take a careful review of all the lines or paragraphs which you *marked*, and make a recollection of the ſections which you thought truly valuable.

THERE is another reaſon alſo why I would chuſe to take a ſuperficial and curſory ſurvey of a book, before I ſit down to read it, and dwell upon it with ſtudious attention; and that is, there may be ſeveral difficulties in it which we cannot eaſily underſtand and conquer at the firſt reading, for want of a fuller comprehenſion of the author's whole ſcheme. And therefore

therefore in ſuch treatiſes we ſhonld not ſtay till we maſter *every difficulty* at the firſt peruſal; for perhaps, many of theſe would appear to be ſolved when we have proceeded farther in that book, or would vaniſh of themſelves upon a *ſecond reading*.

WHAT we cannot reach and penetrate at firſt, may be noted down as matter of after conſideration and enquiry, if the pages that follow do not happen to ſtrike a complete light on thoſe which went before.

III. *If three or four perſons agree to read the ſame book*, and each bring his own remarks upon it at ſome ſet hours appointed for converſation, and they communicate mutually their ſentiments on the ſubject, and debate about it in a friendly manner, this practice will render the reading any author more abundantly beneficial to every one of them.

IV. IF *ſeveral perſons engaged in the ſame ſtudy, take into their hands diſtinct treatiſes on one ſubject*, and appoint a ſeaſon of communication once a week, they may inform each other in a brief manner concerning the ſenſe, ſentiments and method of thoſe ſeveral authors, and thereby promote each others improvement, either by recommending the peruſal of the ſame book to their companions, or perhaps by ſatisfying their enquiries concerning it by converſation, without every ones peruſing it.

V. REMEMBER that your buſineſs in *reading* or in *converſation*, eſpecially on ſubjects of natural, moral, or divine ſcience, is not merely to know the opinion of the author or ſpeaker, for this is but the mere knowledge of hiſtory; but your chief buſineſs is to conſider whether their opinions are right or no, and to improve your own ſolid knowledge of that ſubject by meditation on the themes of their writing or diſcourſe. Deal freely with every author you read, and yield up your aſſent only to evidence and juſt reaſoning on the ſubject.

HERE I would be underſtood to ſpeak only of human authors, and not of the ſacred and inſpired writings. In theſe, our buſineſs indeed is only to find out the ſenſe, and underſtand the true meaning of the paragraph and page, and our aſſent then is bound to follow, when we are before ſatisfied that the writing is divine. Yet I might add alſo, that even this is juſt reaſoning, and this is ſufficient evidence to demand our aſſent.

BUT in the compoſures of men, remember you are a man as well as they; and it is not their reaſon but your own, that is given to guide you when you arrive at years of diſcretion, of manly age and judgment.

VI. LET this therefore be your practice, eſpecially after you have gone through one

one courſe of any ſcience in your academical ſtudies; if a writer on that ſubject maintains the ſame ſentiments as you do, yet if he does *not explain* his ideas or *prove* his poſitions well, mark the faults or defects, and endeavour to do it better, either in the margin of your book, or rather in ſome papers of your own, or at leaſt let it be done in your private meditations. As for inſtance:

WHERE the author is *obſcure*, enlighten him: where he is *imperfect*, ſupply his deficiencies: where he is *too brief* and *conciſe*, amplify a little, and ſet his notions in a fairer view: where he is *redundant*, mark thoſe paragraphs to be retrenched: when he *trifles* and *grows impertinent*, abandon thoſe paſſages or pages: where he *argues*, obſerve whether his reaſons be concluſive: if the concluſion be true, and yet the *argument weak*, endeavour to confirm it by better proofs: where he *derives* or *infers* any propoſitions *darkly* or *doubtfully*, make the juſtice of the inferences appear, and add further inferences or corollaries, if ſuch occur to your mind: where you ſuppoſe he is *in a miſtake*, propoſe your objections and correct his ſentiments: what he *writes ſo well as to approve itſelf* to your judgment both as juſt and uſeful, treaſure it up in your memory, and count it a part of your intellectual gains.

Note,

Note, MANY of theſe ſame directions which I have now given, may be practiſed with regard to *converſation*, as well as *reading*, in order to render it uſeful in the moſt extenſive and laſting manner.

VII. OTHER things alſo of the like nature may be uſefully practiſed with regard to the authors which you read, *viz.* If the *method* of a book be *irregular*, reduce it into form by a little analyſis of your own, or by hints in the margin: if thoſe things are *heaped together* which ſhould be ſeparated, you may wiſely diſtinguiſh and divide them. If ſeveral things relating to the ſame ſubject *are ſcattered up and down ſeparately* through the treatiſe, you may bring them all to one view by references; or if the matter of a book be *really valuable and deſerving*, you may throw it into a better method, reduce it to a more logical ſcheme, or abridge it into a leſſer form; all theſe practices will have a tendency both to advance your ſkill in *logic* and method, to improve your judgment in general, and to give you a fuller ſurvey of that ſubject in particular. When you have finiſhed the treatiſe with all your obſervations upon it, recollect and determine what real improvements you have made by reading that author.

VIII. IF a book has no *index* to it, or *good table of contents*, it is very uſeful to

make one as you are reading it: not with that exactneſs as to include the ſenſe of every page and paragraph, which ſhould be done if you deſigned to print it; but it is ſufficient in your *Index* to take notice only of thoſe parts of the book which are new to you, or which you think well written, and well worthy of your remembrance or review.

SHALL I be ſo free as to aſſure my younger friends, from my own experience, that theſe methods of reading will coſt ſome pains in the firſt years of your ſtudy, and eſpecially in the firſt authors which you peruſe in any ſcience, or on any particular ſubject: but the profit will richly compenſate the pains. And in the following years of life, after you have read a few valuable books on any ſpecial ſubject in this manner, it will be very eaſy to read others of the ſame kind, becauſe you will not uſually find very much new matter in them which you have not already examined.

VIII. IF the writer be remarkable for any *peculiar excellencies or defects in his ſtyle or manner of writing*, make juſt obſervations upon this alſo; and whatever ornaments you find there, or whatſoever blemiſhes occur in the language or manner of the writer, you may make juſt remarks upon them. And remember, that *one book read over in this manner, with all this laborious*

rious meditation, will tend more to enrich your underſtanding, than the ſkimming over the ſurface of twenty authors.

IX. By peruſing books in the manner I have deſcribed, you will make all your *reading* ſubſervient not only to the *enlargement of your treaſures of knowledge*, but alſo to the *improvement of your reaſoning powers.*

THERE are many who read with conſtancy and diligence, and yet make no advances in true knowledge by it. They are delighted with the notions which they read or hear, as they would be with ſtories that are told, but they do not weigh them in their minds as in a juſt balance, in order to determine their truth or falſhood; they make no obſervations upon them, or inferences from them. Perhaps their eye ſlides over the pages, or the words ſlide over their ears, and vaniſh like a *rhapſody* of evening tales, or the ſhadows of a cloud flying over a green field in a ſummer's day.

OR if they review them ſufficiently to fix them in their remembrance, it is merely with a deſign to tell the tale over again, and ſhew what men of learning they are. Thus they dream out their days in a *courſe of reading* without real advantage. As a man may be eating all day, and for want of digeſtion is never nouriſhed; ſo theſe *end-*

leſs readers may cram themſelves in vain with intellectual food, and without real improvement of their minds, for want of digeſting it by proper reflections.

X. BE diligent therefore in obſerving theſe directions. *Enter into the ſenſe and argument* of the authors you read, examine all their proofs, and then judge of the truth or falſhood of their opinions; and thereby you ſhall not only gain a rich increaſe of your underſtandings by thoſe truths which the author teaches, when you ſee them well ſupported, but you ſhall acquire alſo by degrees an habit of judging juſtly, and of reaſoning well, in imitation of the good writer whoſe works you peruſe.

THIS is laborious indeed, and the mind is backward to undergo the fatigue of weighing every argument and tracing every thing to its original. It is much leſs labour to take all things upon truſt; *believing is much eaſier than arguing*. But when *Studentio* had once perſuaded his mind to tie itſelf down to this method which I have preſcribed, he ſenſibly gained an admirable facility to read, and judge of what he read, by his daily practice of it, and the man made large advances in the purſuit of truth; while *Plumbinus* and *Plumeo* made leſs progreſs in knowledge, though they had read over more folios. *Plumeo* ſkimmed

ſkimmed over the pages like a ſwallow over the flowery meads in *May*. *Plumbinus* read every line and ſyllable, but did not give himſelf the trouble of thinking and judging about them. They both could boaſt in company of their great reading, for they knew more titles and pages than *Studentio*, but were far leſs acquainted with ſcience.

I CONFESS thoſe whoſe reading is deſigned only to fit them for *much talk*, and *little knowledge*, may content themſelves to run over their authors in ſuch a ſudden and trifling way; they may devour libraries in this manner, yet be poor reaſoners at laſt, and have no ſolid wiſdom or true learning The traveller who walks on fair and ſoftly in a courſe that points right, and examines every turning before he ventures upon it, will come ſooner and ſafer to his journey's end, than he who runs through every lane he meets, though he gallop full ſpeed all the day. The man of *much reading* and a *large retentive memory*, but without *meditation*, may become, in the ſenſe of the world, a *knowing man*; and if he converſes much with the ancients, he may attain the fame of *learning* too: but he ſpends his days afar off from wiſdom and true judgment, and poſſeſſes very little of the ſubſtantial riches of the mind.

XI. *NEVER apply yourſelves to read any human author with a determination before-*

hand either for or againſt him, or with a ſettled reſolution to believe or diſbelieve, to confirm or to oppoſe whatſoever he ſaith; but always read with deſign to lay your mind open to truth, and to embrace it whereſoever you find it, as well as to reject every falſhood, though it appear under ever ſo fair a diſguiſe. How unhappy are thoſe men who ſeldom take an author into their hands, but they have determined before they begin, whether they will like or diſlike him! They have got ſome notion of his name, his character, his party, or his principles, by general converſation, or perhaps by ſome ſlight view of a few pages; and having all their own opinions adjuſted beforehand, they read all that he writes with a prepoſſeſſion either for or againſt him. Unhappy thoſe who hunt and purvey for a party, and ſcrape together out of every author, all thoſe things, and thoſe only which favour their own tenets, while they deſpiſe and neglect all the reſt!

XII. YET take this *caution*. I would not be underſtood here, as though I perſuaded a perſon to live without any ſettled principles at all, by which to judge of men and books and things: or, that I would keep a man always doubting about his foundations. The chief things that I deſign in this advice, are theſe three.

1. THAT

1. THAT after our moſt neceſſary and important principles of ſcience, prudence and religion, are ſettled upon good grounds, with regard to our preſent conduct and our future hopes, we ſhould read with a juſt freedom of thought, all thoſe books which treat of ſuch ſubjects as may admit of doubt and reaſonable diſpute. Nor ſhould any of our opinions be ſo reſolved upon, eſpecially in younger years, as never to hear or to bear an oppoſition to them.

2. WHEN we peruſe thoſe authors who defend our own ſettled ſentiments, we ſhould not take all their arguings for juſt and ſolid; but we ſhould make a wiſe diſtinction betwixt the corn and the chaff, between ſolid reaſoning and the mere ſuperficial colours of it; nor ſhould we readily ſwallow down all their leſſer opinions becauſe we agree with them in the greater.

3. THAT when we read thoſe authors which oppoſe our moſt certain and eſtabliſhed principles, we ſhould be ready to receive any informations from them in other points, and not abandon at once every thing they ſay, though we are well fixed in oppoſition to their main point of arguing.

—— *Fas eſt, & ab hoſte doceri.* VIRG.

Seize upon truth where'er 'tis found,
Among your friends among your foes,
On Chriſtian *or on* Heathen *ground;*
The flower's divine where'er it grows:
Neglect the prickles, and aſſume the roſe.

XIII. WHAT I have ſaid hitherto on this ſubject, relating to *books* and *reading*, muſt be chiefly underſtood of that ſort of books, and thoſe hours of our reading and ſtudy, whereby we deſign to improve the intellectual powers of the mind with natural, moral, or divine knowledge. As for thoſe treatiſes which are written to direct or to inforce and perſuade our practice, there is one thing further neceſſary; and that is, that when our conſciences are convinced that theſe rules of prudence or duty belong to us, and require our conformity to them, we ſhould then call ourſelves to account, and enquire ſeriouſly whether we have put them in practice or no; we ſhould dwell upon the arguments, and impreſs the motives and methods of perſuaſion upon our own hearts, till we feel the force and power of them inclining us to the practice of the things which are there recommended.

IF folly or vice be repreſented in its open colours, or its ſecret diſguiſes, let us ſearch our hearts, and review our lives, and enquire how far we are criminal; nor ſhould

ſhould we ever think we have done with the treatiſe till we feel ourſelves in ſorrow for our paſt miſconduct, and aſpiring after a victory over thoſe vices, or till we find a cure of thoſe follies begun to be wrought upon our ſouls.

IN all our ſtudies and purſuits of knowledge, let us remember that virtue and vice, ſin and holineſs, and the conformation of our hearts and lives to the duties of true religion and morality, are things of far more conſequence than all the furniture of our underſtandings, and the richeſt treaſures of mere ſpeculative knowledge; and that, becauſe they have a more immediate and effectual influence upon our eternal felicity or eternal ſorrow.

XIV. THERE is yet another ſort of books, of which it is proper I ſhould ſay ſomething while I am treating on this ſubject; and theſe are *hiſtory*, *poeſy*, *travels*, *books of diverſion or amuſement*; among which we may reckon alſo little common *pamphlets*, *news-papers*, or ſuch like: for many of theſe, I confeſs once reading may be ſufficient, where there is a tolerable good memory.

OR when ſeveral perſons are in company, and one reads to the reſt ſuch ſort of writings, once hearing may be ſufficient; provided that every one be ſo attentive, and ſo free as to make their occaſional remarks on

on ſuch lines or ſentences, ſuch periods or paragraphs as in their opinion deſerve it. Now all thoſe paragraphs or ſentiments deſerve a remark, which are new and uncommon, are noble and excellent for the matter of them, are ſtrong and convincing for the argument contained in them, are beautiful and elegant for the language or the manner, or any way worthy of a ſecond rehearſal; and at the requeſt of any of the company let thoſe paragraphs be read over again.

SUCH parts alſo of theſe writings as may happen to be remarkably ſtupid or ſilly, falſe or miſtaken, ſhould become ſubjects of an occaſional criticiſm, made by ſome of the company; and this may give occaſion to the repetition of them for confirmation of the cenſure, for amuſement, or diverſion.

STILL let it be remembered, that where the hiſtorical narration is of conſiderable moment, where the poeſy, oratory, *&c.* ſhine with ſome degrees of perfection and glory, a ſingle reading is neither ſufficient to ſatisfy a mind that has a true taſte of this ſort of writings; nor can we make the fulleſt and beſt improvement of them without proper reviews, and that in our retirement as well as in company. Who is there that has any goût for polite writings that would be ſufficiently ſatisfied with hearing

hearing the beautiful pages of *Steele* or *Addiſon*, the admirable deſcriptions of *Virgil* or *Milton*, or ſome of the fineſt poems of *Pope*, *Young*, or *Dryden*, once read over to them, and then lay them by for ever?

XV. AMONG theſe writings of the latter kind, we may juſtly reckon ſhort *miſcellaneous eſſays* on all manner of ſubjects: ſuch as the *Occaſional Papers*, the *Tatlers*, the *Spectators*, and ſome other books that have been compiled out of the weekly or daily products of the preſs, wherein are contained a great number of bright thoughts, ingenious remarks, and admirable obſervations, which have had a conſiderable ſhare in furniſhing the preſent age with knowledge and politeneſs.

I wiſh every paper among theſe writings could have been recommended both as innocent and uſeful. I wiſh every unſeemly idea and wanton expreſſion had been baniſhed from amongſt them, and every trifling page had been excluded from the company of the reſt when they had been bound up in volumes. But it is not to be expected, in ſo imperfect a ſtate, that every page or piece of ſuch mixed public papers ſhould be entirely blameleſs and laudable. Yet in the main it muſt be confeſſed, there is ſo much virtue, prudence, ingenuity and goodneſs in them, eſpecially in eight volumes of *Spectators*, there is ſuch a reverence of

things ſacred, ſo many valuable remarks for our conduct in life, that they are not improper to lie in parlours, or ſummer-houſes, or places of uſual reſidence, to entertain our thoughts in any moments of leiſure, or vacant hours that occur. There is ſuch a diſcovery of the follies, iniquities, and faſhionable vices of mankind contained in them, that we may learn much of the humours and madneſſes of the age, and the public world, in our own ſolitary retirement, without the danger of frequenting vicious company, or receiving the mortal infection.

XVI. AMONG other books which are proper and requiſite, in order to improve our knowledge in general, or our acquaintance with any particular ſcience, it is neceſſary that we ſhould be furniſhed with *Vocabularies* and *Dictionaries* of ſeveral ſorts, *viz.* Of *common words*, *idioms* and *phraſes*, in order to explain their *ſenſe:* of *technical words* or the *terms of art*, to ſhew their uſe in arts and ſciences; of *names of men*, *countries*, *towns*, *rivers*, &c. which are called *hiſtorical* and *geographical dictionaries*, &c. Theſe are to be conſulted and uſed upon every occaſion; and never let an unknown word paſs in your reading, without ſeeking for its ſenſe and meaning in ſome of theſe writers.

IF ſuch books are not at hand, you muſt ſupply the want of them, as well as you can, by conſulting ſuch as can inform you: and it is uſeful to note down the matters of doubt and enquiry in ſome pocket-book, and take the firſt opportunity to get them reſolved either by perſons or books when we meet with them.

XVII. BE not ſatisfied with a *mere knowledge of the beſt authors* that treat of any ſubject, inſtead of *acquainting yourſelves thoroughly with the ſubject itſelf*. There is many a young ſtudent that is fond of enlarging his *knowledge of books*, and he contents himſelf with the notice he has of their *title-page*, which is the attainment of a *bookſeller* rather than a *ſcholar*. Such perſons are under a great temptation to practiſe theſe two follies. (1.) *To heap up a great number of books* at greater expence than moſt of them can bear, and to furniſh their libraries infinitely better than their underſtandings. And (2.) when they have got ſuch rich treaſures of knowledge upon their ſhelves, they *imagine themſelves men of learning*, and take a pride in talking of the names of famous authors, and the ſubjects of which they treat, without any real improvement of their own minds in true ſcience or wiſdom. At beſt, their learning reaches no farther than the *indexes* and *tables* of contents, while they know not how

to

to judge or reaſon concerning the matters contained in thoſe authors.

AND indeed how many volumes of learning ſoever a man poſſeſſes, he is ſtill deplorably poor in his underſtanding, till he has made theſe ſeveral parts of learning his own property, by reaſoning, by judging for himſelf, and remembering what he has read.

CHAP. V.

JUDGMENT OF BOOKS.

I. IF we would *form a judgment of a book* which we have not ſeen before, the firſt thing that offers is the *title-page*, and we may ſometimes gueſs a little at the import and deſign of a book thereby: though it muſt be confeſt, that titles are often deceitful, and promiſe more than the book performs. The *author's name*, if it be known in the world, may help us to conjecture at the performance a little more, and lead us to gueſs in what manner it is done. A peruſal of the *preface or introduction* (which I before recommended) may further aſſiſt our judgment; and if there be an *index of the contents*, it will give us ſtill ſome advancing light.

IF

IF we have not leiſure or inclination to read over the book itſelf regularly, then by the *titles of chapters*, we may be directed to peruſe ſeveral particular chapters or ſections, and obſerve whether there be any thing valuable or important in them. We ſhall find hereby whether the author explains his ideas clearly, whether he reaſons ſtrongly, whether he methodizes well, whether his thoughts and ſenſe be manly and his manner polite; or, on the other hand, whether he be obſcure, weak, trifling and confuſed: or, finally, whether the matter may not be ſolid and ſubſtantial, though the manner or ſtyle be rude and diſagreeable.

II. BY having run through ſeveral chapters and ſections in this manner, we may generally judge whether the treatiſe be worth a compleat peruſal or no. But if by ſuch an occaſional ſurvey of ſome chapters, our expectation be utterly diſcouraged, we may well lay aſide that book; for there is great probability he can be but an indifferent writer on that ſubject, if he affords but one *prize* to divers *blanks*, and it may be ſome downright *blots* too. The piece can hardly be valuable if in ſeven or eight chapters which we peruſe, there be but little truth, evidence, force of reaſoning, beauty, and ingenuity, thought, *&c.* mingled with much error, ignorance, impertinence, dulneſs, mean and common thoughts, inaccuracy,

curacy, ſophiſtry, railing, *&c.* Life is too ſhort, and time is too precious, to read every new book quite over, in order to find that it is not worth the reading.

III. THERE are *ſome general miſtakes* which perſons are frequently guilty of in paſſing a judgment on the books which they read.

ONE is this; when a treatiſe is written but tolerably well, we are ready to paſs a favourable judgment of it, and ſometimes to exalt its character far beyond its merit, if it *agree with our own principles, and ſupport the opinions of our party*. On the other hand, if the author be of *different ſentiments*, and *eſpouſe contrary principles*, we can find neither wit nor reaſon, good ſenſe nor good language in it. Whereas, alas, if our opinions of things were certain and infallible truth, yet a ſilly author may draw his pen in the defence of them, and he may attack even groſs errors with feeble and ridiculous arguments. *Truth* in this world is not always attended and ſupported by the wiſeſt and ſafeſt methods; and *error*, though it can never be maintained by juſt reaſoning, yet may be artfully covered and defended: an ingenious writer may put excellent colours upon his own miſtakes. Some *Socinians*, who deny the atonement of *Chriſt*, have written well, and with much appearance of argument for their own unſcriptural

tural ſentiments, and ſome writers for the *trinity* and *ſatisfaction* of *Chriſt* have expoſed themſelves and the ſacred doctrine, by their feeble and fooliſh manner of handling it. Books are never to be judged of merely by their ſubject, or the opinion they repreſent, but by the juſtneſs of their ſentiments, the beauty of their manner, the force of their expreſſion, or the ſtrength of reaſon, and the weight of juſt and proper argument which appears in them.

BUT this folly and weakneſs of trifling inſtead of arguing, does not happen to fall only to the ſhare of *Chriſtian* writers: there are ſome who have taken the pen in hand to ſupport the *deiſtical* or *antichriſtian* ſcheme of our days, who make big pretences to reaſon upon all occaſions, but ſeem to have left it quite behind them when they are jeſting with the bible, and grinning at the books which we call ſacred. Some of theſe performances would ſcarcely have been thought tolerable, if they had not aſſaulted the *Chriſtian* faith, though they are now grown up to a place among the admired pens. I much queſtion whether ſeveral of the *rhapſodies* called the *Characteriſtics*, would ever have ſurvived the firſt edition, if they had not diſcovered ſo ſtrong a tincture of *infidelity*, and now and then caſt out a profane ſneer at *our holy religion*. I have ſometimes indeed been

ready to wonder, how a book in the main ſo looſely written, ſhould ever obtain ſo many readers amongſt men of ſenſe. Surely they muſt be conſcious in the peruſal, that ſometimes a *patrician* may write as idly as a man of *plebeian* rank, and trifle as much as an old ſchool-man, though it is in another form. I am forced to ſay, there are few books that ever I read, which made any pretence to a great genius, from which I derived ſo little valuable knowledge as from theſe treatiſes. There is indeed amongſt them a lively pertneſs, a parade of literature. and much of what ſome folks now a days call *politeneſs*; but it is hard that we ſhould be bound to admire all the reveries of this author, under the penalty of being unfaſhionable.

IV. *ANOTHER miſtake* which ſome perſons fall into is this. When they read a treatiſe on a ſubject with which they *have but little accquaintance*, they find almoſt every thing new and ſtrange to them, their underſtandings are greatly entertained and improved by the occurrence of many things which were unknown to them before, they admire the treatiſe, and commend the author at once; whereas if they had but attaine *a good degree of ſkill in that ſcience*, perhaps they would find that the author had written very poorly, that neither his ſenſe nor his method was juſt

and proper; and that he had nothing in him but what was very common or trivial in his diſcourſes on that ſubject.

HENCE it comes to paſs, that *Cario* and *Faber* who were both bred up to labour and unacquainted with the *ſciences*, ſhall admire one of the *weekly papers*, or a *little pamphlet* that talks pertly on ſome critical or learned theme, becauſe the matter is all ſtrange and new to them, and they join to extol the writer to the ſkies; and for the ſame reaſon a *young academic* ſhall dwell upon a *Journal* or an *Obſervator* that treats of *trade* and *politics* in a dictatoral ſtyle, and ſhall be laviſh in praiſe of the author. While at the ſame time, perſons well ſkilled in thoſe different ſubjects, hear the impertinent tattle with a juſt contempt; for they know how weak and awkward many of thoſe little diminutive diſcourſes are; and that thoſe very papers of *ſcience*, *politics* or *trade*, which were ſo much admired by the ignorant, are perhaps, but very mean performances; though it muſt be alſo confeſſed, there are ſome excellent eſſays in thoſe papers, and that upon ſcience as well as trade.

V. BUT there is a danger of miſtake in our *judgment of books* on the other hand alſo: for when we have made ourſelves *maſters of any particular theme of knowledge*, and ſurveyed it long on all ſides, there

is perhaps ſcarcely any writer on that ſubject who much entertains and pleaſes us afterwards, becauſe we find little or nothing new in him; and yet in a true judgment perhaps, his ſentiments are moſt proper and juſt, his explications clear, and his reaſonings ſtrong, and all the parts of the diſcourſe are well connected and ſet in a happy light; but we knew moſt of thoſe things before, and therefore they ſtrike us not, and we are in danger of diſcommending them.

THUS the *learned* and the *unlearned*, have their ſeveral diſtinct dangers and prejudices ready to attend them in their judgment of the writings of men. Theſe which I have mentioned are a *ſpecimen* of them, and indeed but a *mere ſpecimen*; for the prejudices that warp our judgment aſide from truth, are almoſt infinite and endleſs.

VI. YET I cannot forbear to point out two or three more of theſe follies, that I may attempt ſomething toward the correction of them, or at leaſt to guard others againſt them.

THERE are ſome perſons of a forward and lively temper, who are fond to intermeddle with all appearances of knowledge, and will give their judgment on a book as ſoon as the title of it is mentioned, for they would not willingly ſeem ignorant of any thing that others know. And eſpecially if they happen to have any ſuperior character

character or paſſions of this world, they fancy they have a right to talk freely upon every thing that ſtirs or appears, though they have no other pretence to this freedom. *Divito* is worth forty thouſand pounds; *Politulus* is a fine young gentleman, who ſparkles in all the ſhining things of dreſs and equipage; *Aulinus* is a ſmall attendant on a miniſter of ſtate, and is at court almoſt every day. Theſe three happened to meet in a viſit, where an excellent book of warm and refined devotions lay in the window. *What dull ſtuff is here?* ſaid *Divito*, *I never read ſo much nonſenſe in one page in my life, nor would I give a ſhilling for a thouſand ſuch treatiſes.* *Aulinus*, though a courtier, and not uſed to ſpeak roughly, yet would not allow there was a line of good ſenſe in the book, and pronounced him a madman that wrote it in his ſecret retirement, and declared him a fool that publiſhed it after his death. *Politulus* had more manners than to differ from men of ſuch a rank and character, and therefore he ſneered at the devout expreſſions as he heard them read, and made the divine treatiſe a matter of ſcorn and ridicule; and yet it was well known, that neither this fine gentleman, nor the courtier, nor the man of wealth, had a grain of devotion in them beyond their horſes that waited at the door with their gilded chariots. But this is the way of the

world: blind men will talk of the beauty of colours, and of the harmony or diſproportion of figures in painting; the deaf will prate of diſcords in muſic; and thoſe who have nothing to do with religion, will arraign the beſt treatiſe on divine ſubjects, though they do not underſtand the very language of the ſcripture, nor the common terms or phraſes uſed in *Chriſtianity*.

VII. I might here name another ſort of judges, who will ſet themſelves up to decide in favour of an author, or will pronounce him a mere blunderer, according to the company they have kept, and the judgment they have heard paſt upon a book by others of their own ſtamp or ſize, though they have no knowledge or taſte of the ſubject themſelves. Theſe with a fluent and voluble tongue become mere ecchos of the praiſes or cenſures of other men. *Sonillus* happened to be in the room where the three gentlemen juſt mentioned gave out their thoughts ſo freely upon an admirable book of devotion: and two days afterwards he met with ſome friends of his where this book was the ſubject of converſation and praiſe. *Sonillus* wondered at their dulneſs, and repeated the jeſts which he had heard caſt upon the weakneſs of the author. His knowledge of the book and his deciſion upon it was all from *hearſay*, for he had never ſeen it: and if he had read

it

it through, he had no manner of right to judge about the things of religion, having no more knowledge, nor taſte of any thing of inward piety, than a hedgehog or a bear has of politeneſs.

WHEN I had written theſe remarks, *Probus*, who knew all theſe four gentlemen, wiſhed they might have opportunity to read their own character as it is repreſented here. Alas! *Probus*, I fear it would do them very little good, though it may guard others againſt their folly: for there is never a one of them would find their own name in theſe characters if they read them, though all their acquaintance would acknowledge the features immediately, and ſee the perſons almoſt alive in the picture.

VIII. THERE is yet another miſchievous principle which prevails among ſome perſons in paſſing a judgment on the writings of others, and that is, when from the ſecret ſtimulation of *vanity*, *pride* or *envy*, they deſpiſe a valuable book, and throw contempt upon it by wholeſale: and if you aſk them the reaſon of their ſevere cenſure, they will tell you perhaps, they have found a miſtake or two in it, or there are a few ſentiments or expreſſions not ſuited to their tooth and humour. *Bavius* cries down an admirable treatiſe of philoſophy, and ſays there is *atheiſm* in it, becauſe there

are a few ſentences that ſeem to ſuppoſe *brutes to be mere machines*. Under the ſame influence, *Momus* will not allow *Paradiſe Loſt* to be a good poem, becauſe he had read ſome flat and heavy lines in it, and he thought *Milton* had too much honour done him. It is a paultry humour that inclines a man to rail at any human performance becauſe it is not abſolutely perfect. *Horace* would give us a better example.

Sunt delicta quibus nos ignoviſſe velimus,
Nam neque chorda ſonum reddit quam vult manus & mens,
Nec ſemper feriet quodcunque minabitur arcus:
Atque ubi plura nitent in carmine, non ego paucis
Offendor maculis, quas aut incuria fudit,
Aut humana parum cavit natura.

Hor. de Art. Poet.

Thus *Engliſhed.*

Be not too rigidly cenſorious:
A ſtring may jar in the beſt maſter's hand,
And the moſt ſkilful archer miſs his aim:
So in a poem elegantly writ
I will not quarrel with a ſmall miſtake,
Such as our nature's frailty may excuſe.

Roſcommon.

THIS noble tranſlator of *Horace*, whom I here cite, has a very honourable opinion of

of *Homer* in the main, yet he allows him to be juſtly cenſured for ſome groſſer ſpots and blemiſhes in him.

For who without averſion ever look'd
On holy garbage, tho' by Homer *cook'd,*
Whoſe railing heroes, and whoſe wounded gods,
Make ſome ſuſpect he ſnores as well as nods.

SUCH wiſe and juſt diſtinctions ought to be made when we paſs a judgment on mortal things, but *envy* condemns by wholeſale. *Envy* is a curſed plant; ſome fibres of it are rooted almoſt in every man's nature, and it works in a ſly and imperceptible manner, and that even in ſome perſons who in the main are men of wiſdom and piety. They know not how to bear the praiſes that are given to an ingenious author, eſpecially if he be *living* and of their *profeſſion*, and therefore they will, if poſſible, find ſome blemiſh in his writings, that they may nibble and bark at it. They will endeavour to diminiſh the honour of the beſt treatiſe that has been written on any ſubject, and to render it uſeleſs by their cenſures, rather than ſuffer their envy to lie aſleep, and the little miſtakes of that author to paſs unexpoſed. Perhaps they will commend the work in general with a pretended air of candour, but paſs

ſo

ſo many ſly and invidious remarks upon it afterward, as ſhall effectually deſtroy all their cold and formal praiſes *.

IX. WHEN a perſon feels any thing of this *invidious humour* working in him, he may by the following conſiderations attempt the correction of it. Let him think with himſelf how many are the *beauties* of ſuch an author whom he cenſures, in compariſon of his *blemiſhes*, and remember that it is a much more honour able and good-natured thing to find out peculiar beauties than faults: true and *undiſguiſed candour* is a much more amiable and divine talent than *accuſation*. Let him reflect again, what an eaſy matter it is to *find a miſtake* in all *human* authors, who are neceſſarily fallible and imperfect.

I CONFESS where an author ſets up himſelf to ridicule *divine* writers and things ſacred, and yet aſſumes an air of ſovereignty and dictatorſhip, to exalt and almoſt deify all the *Pagan* ancients, and caſt his ſcorn upon all the moderns, eſpecially if they do but ſavour of miracles and the goſpel, it

* I grant when wiſdom itſelf cenſures a weak and fooliſh performance, it will paſs its ſevere ſentence, and yet with an air of candour, if the author has any thing valuable in him: but *envy* will oftentimes imitate the ſame favourable airs, in order to make its falſe cavils appear more juſt and credible, when it has a mind to ſnarl at ſome of the brighteſt performances of a human writer.

it is fit the admirers of this author ſhould know that *nature and theſe ancients* are not the ſame, though ſome writers always unite them. Reaſon and nature never made theſe ancient *heathens* their ſtandard, either of art or genius, of writing or heroiſm. Sir *Richard Steele* in his little eſſay, called *The Chriſtian Hero*, has ſhewn our *Saviour* and St. *Paul* in a more glorious and tranſcendent light, than a *Virgil* or a *Homer* could do for their *Achilles*, *Ulyſſes*, or *Æneas*; and I am perſuaded if *Moſes* and *David* had not been inſpired writers, theſe very men would have ranked them at leaſt with an *Herodotus* and *Horace*, if not given them the ſuperior place.

BUT where an author has many beauties conſiſtent with virtue, piety, and truth, let not little critics exalt themſelves, and ſhower down their ill-nature upon him, without bounds or meaſure; but rather ſtretch their own powers of ſoul till they write a treatiſe ſuperior to that which they condemn. This is the nobleſt and ſureſt manner of ſuppreſſing what they cenſure.

A LITTLE wit, or a little learning, with a good degree of vanity and ill-nature, will teach a man to pour out whole pages of remark and reproach upon one real or fancied miſtake of a great and good author: and this may be dreſſed up by the ſame talents, and made entertaining enough to the world,

world, who loves reproach and ſcandal: but if the remarker would but once make this attempt, and try to *outſhine the author by writing a better book on the ſame ſubject*, he would ſoon be convinced of his own inſufficiency, and perhaps might learn to judge more juſtly and favourably of the performance of other men. A *cobler*, or a *ſhoemaker* may find ſome little fault with the latchet of a ſhoe that an *Apelles* had painted, and perhaps with juſtice too; when the whole figure and portraiture is ſuch as none but an *Apelles* could paint. Every poor low genius may cavil at what the richeſt and the nobleſt hath performed; but it is a ſign of *envy* and *malice*, added to the *littleneſs* and *poverty of genius*, when ſuch a cavil becomes a ſufficient reaſon to pronounce at once againſt a bright author and a whole valuable treatiſe.

X. ANOTHER, and that a very frequent fault in paſſing a judgment upon books, is this, that perſons ſpread the ſame praiſes or the ſame reproaches over a whole treatiſe, and all the chapters in it, which are due only to ſome of them. They judge as it were by wholeſale, without making a due diſtinction between the ſeveral parts or ſections of the performance; and this is ready to lead thoſe who hear them talk, into a dangerous miſtake. *Florus* is a great and juſt admirer of the late archbiſhop of *Cambray*,

Cambray, and mightily commends every thing he has written, and will allow no blemiſh in him: whereas the writings of that excellent man are not all of a piece, nor are thoſe very books of his, which have a good number of beautiful and valuable ſentiments in them, to be recommended throughout, or all at once without diſtinction. There is his *Demonſtration of the Exiſtence and Attributes of God*, which has juſtly gained an univerſal eſteem, for bringing down ſome new and noble thoughts of the wiſdom of the creation to the underſtanding of the unlearned, and they are ſuch as well deſerve the peruſal of the men of ſcience, perhaps as far as the 50*th ſection*; but there are many of the following *ſections* which are very weakly written, and ſome of them built upon an enthuſiaſtical and miſtaken ſcheme, akin to the peculiar opinions of father *Malebranche*; ſuch as ſect. 51, 53. *That we know the finite only by the ideas of the infinite.* Sect. 55, 60. *That the ſuperior reaſon in man, is God himſelf acting in him.* Sect. 61, 62. *That the idea of unity cannot be taken from creatures but from God only:* and ſeveral of his ſections, from 65 to 68, upon the doctrine of *liberty*, ſeem to be inconſiſtent. *Again*, toward the end of his book he ſpends more time and pains than are needful in refuting the *Epicurean* fancy of atoms moving eternally through

through infinite changes, which might be done effectually in a much ſhorter and better way.

So in his *Poſthumous* Eſſays, and his *Letters*, there are many admirable thoughts in practical and experimental religion, and very beautiful and divine ſentiments in devotion; but ſometimes in large paragraphs, or in whole chapters together, you find him in the clouds of *myſtic* divinity, and he never deſcends within the reach of common ideas or common ſenſe.

BUT remember this alſo, that there are but few ſuch authors as this great man, who talks ſo very weakly ſometimes, and yet in other places is ſo much ſuperior to the greateſt part of writers.

THERE are other inſtances of this kind where men of good ſenſe in the main ſet up for judges, but they carry too many of their paſſions about them, and then like lovers, they are in rapture at the name of their fair idol; they laviſh out all their incenſe upon that ſhrine, and cannot bear the thought of admitting a blemiſh in them.

YOU ſhall hear *Altinoſo* not only admire *Caſimire* of *Poland* in his lyrics, as the utmoſt purity and perfection of *Latin* poeſy, but he will allow nothing in him to be extravagant or faulty, and will vindicate every line: nor can I much wonder at it, when

when I have heard him pronounce *Lucan* the beſt of the ancient *Latins*, and idolize his very weakneſſes and miſtakes. I will readily acknowledge the odes of *Caſimire* to have more ſpirit and force, more magnificence and fire in them, and in twenty places ariſe to more dignity and beauty than I could ever meet with in any of our modern poets: yet I am afraid to ſay, that *Palla ſutilis è luce* has dignity enough in it for *a robe made for the Almighty*, lib. 4. od. 7. l. 37. or that the *man of virtue* in od. 3. l. 44. *under the ruins of heaven and earth, will bear up the fragments of the falling world with a comely wound on his ſhoulders.*

——— late ruenti
Subjiciens ſua colla cælo
Mundum decoro vulnere fulciet;
Interque cæli fragmina———

YET I muſt needs confeſs alſo, that it is hardly poſſible a man ſhould riſe to ſo exalted and ſublime a vein of poeſy as *Caſimire*, who is not in danger now and then of ſuch extravagancies: *but ſtill they ſhould* not be admired or defended, if we pretend to paſs a juſt judgment on the writings of the greateſt men.

MILTON is a noble genius, and the world agrees to confeſs it; his poem of *Paradiſe Loſt* is a glorious performance, and rivals

rivals the moſt famous pieces of antiquity; but that reader muſt be deeply prejudiced in favour of the poet, who can imagine him equal to himſelf through all that work. Neither the ſublime ſentiments, nor dignity of numbers, nor force or beauty of expreſſion are equally maintained, even in all thoſe parts which require grandeur or beauty, force or harmony. I cannot but conſent to Mr. *Dryden*'s opinion, though I will not uſe his words, that for ſome ſcores of lines together, there is a coldneſs and flatneſs, and almoſt a perfect abſence of that ſpirit of poeſy which breathes, and lives, and flames in other pages.

XI. WHEN you hear any perſon pretending to give his judgment of a book, conſider with yourſelf whether he be a *capable* judge, or whether he may not lie under ſome unhappy bias or *prejudice*, for or againſt it, or whether he has made a ſufficient enquiry to form his juſteſt ſentiments upon it.

THOUGH he be a man of good ſenſe, yet he is uncapable of paſſing a true judgment of a particular book, if he be not well acquainted with the ſubject of which it treats, *and the manner* in which it is written, be it verſe or proſe; or if he hath not had opportunity or leiſure to look ſufficiently into the writing itſelf.

AGAIN,

AGAIN, though he never be ſo capable of judging on all other accounts, by the knowledge of the ſubject, and of the book itſelf, yet you are to conſider alſo, whether there be any thing in the author, in his manner, in his language, in his opinions, and his particular party, which may warp the ſentiments of him that judgeth, to think well or ill of the treatiſe, and to paſs too favourable or too ſevere a ſentence concerning it.

IF you find that he is either an unfit judge becauſe of his ignorance, or becauſe of his prejudices, his judgment of that book ſhould go for nothing. *Philographo* is a good divine, an uſeful preacher, and an approved expoſitor of ſcripture, but he never had a taſte for any of the polite learning of the age: he was fond of every thing that appeared in a devout dreſs, but all verſe was alike to him: he told me laſt week there was a very fine book of poems publiſhed on the three chriſtian graces, *Faith*, *Hope*, and *Charity*; and a moſt elegant piece of oratory on the four laſt things, *Death*, *Judgment*, *Heaven*, and *Hell*. Do you think I ſhall buy either of thoſe books merely on *Philographo*'s recommendation?

CHAP. VI.

Of living Inſtructions and Lectures, of Teachers and Learners.

I. THERE are few perſons of ſo penetrating a genius, and ſo juſt a judgment, as to be capable of learning the arts and ſciences without the aſſiſtance of *Teachers*. There is ſcarcely any ſcience ſo ſafely and ſo ſpeedily learned, even by the nobleſt genius and the beſt books, without a tutor. His aſſiſtance is abſolutely neceſſary for moſt perſons, and it is very uſeful for all beginners. *Books* are a ſort of *dumb teachers*, they point out the way to learning; but if we labour under any doubt or miſtake, they cannot anſwer ſudden queſtions, or explain preſent doubts and difficulties: this is properly the work of a *living inſtructor*.

II. THERE are very few tutors who are ſufficiently furniſhed with ſuch *univerſal learning*, as to ſuſtain all the parts and provinces of inſtruction. The ſciences are numerous, and many of them lie far wide of each other; and it is beſt to enjoy the inſtruction of two or three tutors at leaſt, in order to run through the whole *Encyclopedia* or *Circle of Sciences*, where it may be obtained;

obtained; then we may expect that each will teach the few parts of learning which are committed to his care in greater perfection. But where this advantage cannot be had with convenience, one great man muſt ſupply the place of two or three common inſtructors.

III. IT is not ſufficient that inſtructors be competently ſkilled in thoſe *ſciences* which they profeſs and teach; but they ſhould have ſkill alſo in the *art or method of teaching*, and patience in the *practice* of it.

IT is a great unhappineſs indeed, when perſons by a ſpirit of party, or faction, or intereſt, or by purchaſe, are ſet up for tutors, who have neither due knowledge of ſcience, nor ſkill in the way of communication. And alas, there are others, who with all their ignorance and inſufficiency, have ſelf-admiration and effrontery enough to ſet up themſelves: and the poor pupils fare accordingly, and grow lean in their underſtandings.

AND let it be obſerved alſo, there are ſome very learned men who know much themſelves, but have not the talent of communicating their own knowledge; or elſe they are lazy, and will take no pains at it. Either they have an obſcure and perplexed way of talking, or they ſhew their learning uſeleſsly, and make a long periphraſis on every word of the book they explain, or

they cannot condeſcend to young beginners, or they run preſently into the elevated parts of the ſcience, becauſe it gives themſelves greater pleaſure, or they are ſoon angry and impatient, and cannot bear with a few impertinent queſtions of a young, inquiſitive, and ſprightly genius; or elſe they ſkim over a ſcience in a very ſlight and ſuperficial ſurvey, and never lead their diſciples into the depths of it.

IV. A GOOD tutor ſhould have *characters* and *qualifications very different from all theſe*. He is ſuch a one as both can and will apply himſelf with diligence and concern, and indefatigable patience to effect what he undertakes; to teach his diſciples, and ſee that they learn, to adapt his way and method as near as may be to the various diſpoſitions, as well as to the capacities of thoſe whom he inſtructs, and to enquire often into their progreſs and improvement.

AND he ſhould take particular care of his own temper and conduct, that there be nothing in him or about him which may be of ill example; nothing that may ſavour of a haughty temper, a mean and ſordid ſpirit; nothing that may expoſe him to the averſion or to the contempt of his ſcholars, or create a prejudice in their minds againſt him and his inſtructions: but, if poſſible, he ſhould have ſo much of a natural candour and ſweetneſs mixt with all the improve-

ments

ments of learning, as might convey knowledge into the minds of his diſciples with a ſort of gentle inſinuation and ſovereign delight, and may tempt them into the higheſt improvements of their reaſon by a reſiſtleſs and inſenſible force. But I ſhall have occaſion to ſay more on this ſubject, when I come to ſpeak more directly of the *methods of the communication of knowledge*.

V. THE *learner* ſhould attend with conſtancy and care on all the inſtructions of his *tutor*; and if he happens to be at any time unavoidably hindered, he muſt endeavour to retrieve the loſs by double induſtry for time to come. He ſhould always recollect and review his lectures, read over ſome other author or authors upon the ſame ſubject, confer upon it with his inſtructor or with his aſſociates, and write down the cleareſt reſult of his preſent thoughts, reaſonings, and enquiries, which he may have recourſe to hereafter, either to re-examine them, and to apply them to proper uſe, or to improve them further to his own advantage.

VI. A *ſtudent* ſhould never ſatisfy himſelf with bare attendance on the lectures of his *tutor*, unleſs he clearly takes up his ſenſe and meaning, and underſtands the things which he teaches. A *young diſciple* ſhould behave himſelf ſo well as to gain the affection and the ear of his *inſtructor*, that

upon every occaſion he may with the utmoſt freedom aſk queſtions, and talk over his own ſentiments, his doubts and difficulties with him, and in an humble and modeſt manner deſire the ſolution of them.

VII. LET the *learner* endeavour to maintain an honourable opinion of his *inſtructor*, and heedfully liſten to his *inſtructions*, as one willing to be led by a more experienced guide: and though he is not bound to fall in with every ſentiment of his tutor, yet he ſhould ſo far comply with him, as to reſolve upon a juſt conſideration of the matter, and try and examine it thoroughly with an honeſt heart, before he preſume to determine againſt him. And then it ſhould be done with great modeſty, with an humble jealouſy of himſelf, and apparent unwillingneſs to differ from his tutor, if the force of argument and truth did not conſtrain him.

VIII. IT is a frequent and growing folly in our age, *that pert young diſciples ſoon fancy themſelves wiſer than thoſe who teach them:* at the firſt view, or upon a very little thought, they can diſcern the inſignificancy, weakneſs and miſtake of what their teacher aſſerts. The youth of our day, by an early petulancy, and pretended liberty of thinking for themſelves, dare reject at once, and that with a ſort of ſcorn, all thoſe ſentiments and doctrines which their teachers

teachers have determined, perhaps after long and repeated conſideration, after years of mature ſtudy, careful obſervation, and much prudent experience.

IX. IT is true, teachers and maſters are not infallible, nor are they always in the right; and it muſt be acknowledged, it is a matter of ſome difficulty for younger minds to maintain a juſt and ſolemn veneration for the *authority and advice of their parents, and the inſtructions of their tutors*, and yet at the ſame time to ſecure to themſelves a *juſt freedom in their own thoughts*. We are ſometimes too ready to imbibe all their ſentiments without examination, if we reverence and love them; or, on the other hand, if we take all freedom to conteſt their opinions, we are ſometimes tempted to caſt off that love and reverence to their perſons which God and nature dictate. Youth is ever in danger of theſe two extremes.

X. BUT I think I may ſafely conclude thus: though the authority of a teacher muſt not abſolutely determine the judgment of his pupil, yet young and raw and unexperienced learners ſhould pay all proper deference that can be, to the inſtructions of their parents and teachers, ſhort of abſolute ſubmiſſion to their dictates. Yet ſtill we muſt maintain this, that they ſhould never receive any opinion into their aſſent,

whether it be conformable or contrary to the tutor's mind, without ſufficient evidence of it firſt given to their own reaſoning powers.

CHAP. VII.

Of learning a LANGUAGE.

THE firſt thing required in *reading an author*, or in *hearing lectures of a* tutor, is, that you well underſtand the *language* in which they write or ſpeak. *Living languages*, or ſuch as are the native tongue of any nation in the preſent age, are more eaſily learnt and taught by a few rules, and much familiar converſe, joined to the reading ſome proper authors. The *dead languages* are ſuch as ceaſe to be ſpoken in any nation; and even theſe are more eaſy to be taught (as far as may be) in that method wherein *living languages* are beſt learnt, *i. e.* partly by rule, and partly by rote or cuſtom. And it may not be improper in this place to mention a very few *directions for that purpoſe*.

I. *BEGIN with the moſt neceſſary and moſt general obſervations and rules which belong*

belong to that language, compiled in the form of a grammar; and theſe are but few in moſt languages. The regular declenſions and variations of nouns and verbs, ſhould be early and thoroughly learnt by heart, together with twenty or thirty of the plaineſt and moſt neceſſary rules of *ſyntax*.

BUT let it be obſerved, that in almoſt all languages, ſome of the very commoneſt *nouns* and *verbs* have many irregularities in them: ſuch are the common *auxiliary* verbs *to be* and *to have*, *to do* and *to be done*, &c. The *comparatives* and *ſuperlatives* of the words *good*, *bad*, *great*, *much*, *ſmall*, *little*, &c. and theſe ſhould be learnt among the firſt rules and variations, becauſe they continually occur.

BUT as to other words which are leſs frequent, let but few of the *anomalies* or irregularities of the tongue be taught among the *general rules* to young beginners. Theſe will better come in afterwards to be learnt by advanced ſcholars in a way of notes on the rules, as in the *Latin* grammar called the *Oxford Grammar*, or in *Ruddiman*'s notes on his *Rudiments*, &c. Or they may be learnt by examples alone, when they do occur; or by a larger and more complete ſyſtem of grammar, which deſcends to the more particular forms of ſpeech: ſo the *heteroclite* nouns of the *Latin* tongue, which are taught in the ſchool-

ſchool-book called *Quæ genus*, ſhould not be touched in the firſt learning of the rudiments of the tongue.

II. As the *grammar* by which we learn any tongue ſhould be very ſhort at firſt, ſo *it muſt be written in a tongue with which you are well acquainted*, and which is very familiar to you. Therefore I much prefer even the common *Engliſh accidence* (as it is called) to any *grammar* whatſover written in *Latin* for this end. The *Engliſh accidence* has doubtleſs many faults: but thoſe editions of it which were printed ſince the year 1728, under the correction of a learned profeſſor, are the beſt; or the *Engliſh Rudiments* of the *Latin* tongue, by that learned *North Briton* Mr. *Ruddiman*, which are perhaps the moſt uſeful books of this kind which I am acquainted with; eſpecially becauſe I would not depart too far from the ancient and common forms of teaching, which ſeveral good grammarians have done, to the great detriment of ſuch lads as have been removed to other ſchools.

THE tireſome and unreaſonable method of learning the *Latin tongue* by a *grammar* with *Latin* rules, would appear even to thoſe maſters who ſo teach it, in its proper colours of abſurdity and ridicule, if thoſe very maſters would attempt to learn the *Chineſe* or *Arabic* tongue, by a grammar written in the *Arabic* or the *Chineſe language*.

language. Mr. *Clarke* of *Hull* has ſaid enough in a few pages of the preface to his new grammar 1723, to make that practice appear very irrational and improper; though he has ſaid it in ſo warm and angry a manner that it has kindled Mr. *Ruddiman* to write againſt him, and to ſay what can be ſaid to vindicate a practice, which, I think, is utterly indefenſible.

III. *At the ſame time when you begin the rules begin alſo the practice.* As for inſtance, when you decline *muſa, muſæ,* read and conſtrue the ſame day ſome eaſy *Latin* author by the help of a tutor, or with ſome *Engliſh* tranſlation: chuſe ſuch a book whoſe ſtyle is ſimple, and the ſubject of diſcourſe is very plain, obvious, and not hard to be underſtood; many little books have been compoſed with this view, as *Corderius*'s *Colloquies,* ſome of *Eraſmus*'s little writings, the ſayings of the wiſe men of *Greece, Cato*'s moral diſtichs, and the reſt which are collected at the end of Mr. *Ruddiman*'s *Engliſh* grammar, or the *Latin Teſtament* of *Caſtellio*'s tranſlation, which is accounted the pureſt *Latin,* &c. Theſe are very proper upon this occaſion, together with *Æſop*'s and *Phædrus*'s *Fables,* and little ſtories, and the common and daily affairs of domeſtic life written in the *Latin* tongue. But let the higher poets, and orators and hiſtorians, and other writers whoſe language

is

is more laboured, and whoſe ſenſe is more remote from common life, be rather kept out of ſight till there be ſome proficiency made in the language.

IT is ſtrange, that maſters ſhould teach children ſo early *Tully*'s *Epiſtles* or *Orations*, or the *poems* of *Ovid* or *Virgil*, whoſe ſenſe is oftentimes difficult to find, becauſe of the great tranſpoſition of the words; and when they have found the grammatical ſenſe, they have very little uſe of it, becauſe they have ſcarcely any notion of the ideas and deſign of the writer, it being ſo remote from the knowledge of a child: whereas little common ſtories and colloquies, and the rules of a child's behaviour, and ſuch obvious ſubjects, will much better aſſiſt the memory of their words by their acquaintance with the things.

IV. HERE it may be uſeful alſo, to appoint the learner *to get by heart the more common and uſeful words*, both *nouns* and *adjectives*, *pronouns* and *verbs*, out of ſome well formed and judicious *vocabulary*. This will furniſh him with names for the moſt familiar ideas.

V. As ſoon as ever the learner is capable, *let the tutor converſe with him in the tongue* which is to be learned, if it be a living language, or if it be *Latin*, which is the living language of the learned world: thus he will acquaint himſelf a little with it by *rote*

as

as well as by *rule*, and by living practice as well as by reading the writings of the dead. For if a child of two years old by this method learns to ſpeak his mother-tongue, I am ſure the ſame method will greatly aſſiſt and facilitate the learning of any other language to thoſe who are older.

VI. LET *the chief leſſons and the chief exerciſe of ſchools, v. c.* where *Latin* is learnt, (at leaſt for the firſt year or more) *be the nouns, verbs and general rules of ſyntax,* together with a *mere tranſlation out of ſome* Latin *author into* Engliſh; and let ſcholars be employed and examined by their teacher, daily, in reducing the words to their original or theme, to the firſt caſe of nouns or firſt tenſe of verbs, and giving an account of their formations and changes, their *ſyntax* and dependencies, which is called *parſing*. This is a moſt uſeful exerciſe to lead boys into a complete and thorough knowledge of what they are doing.

THE *Engliſh tranſlations*, which the learner has made, ſhould be well corrected by the maſter, and then they ſhould be tranſlated back again for the next day's exerciſe by the child into *Latin*, while the *Latin* author is withheld from him: but he ſhould have the *Latin* words given him in their firſt caſe and tenſe; and ſhould never be left to ſeek them himſelf from a dictionary:

dictionary: and the nearer he tranſlates it to the words of the author whence he derives his *Engliſh*, the more ſhould the child be commended. Thus will he gain ſkill in two languages at once. I think Mr. *Clarke* has done good ſervice to the public by his tranſlations of *Latin* books for this end.

BUT let the fooliſh cuſtom of employing every ſilly boy to make *themes* or *declamations*, and *verſes* upon moral ſubjects in a ſtrange tongue, before he underſtands common ſenſe even in his own language, be abandoned and caſhiered for ever.

VII. As the learner improves, let him *acquaint himſelf with the anomalous words*, the *irregular declenſion of nouns and verbs*, the more *uncommon connections of words in ſyntax*, and the *exceptions of the general rules of grammar*; but let them all be reduced, as far as poſſible, to thoſe ſeveral original and general rules which he has learned, as the proper rank and place to which they belong.

VIII. WHILE he is doing this, it may be *proper for him to converſe with authors which are a little more difficult*, with *hiſtorians*, *orators* and *poets*, &c. but let his tutor inform him of the *Roman* or *Greek* cuſtoms which occur therein. Let the lad then tranſlate ſome parts of them into his mother tongue, or into ſome other well-known

known language, and thence back again into the original language of the author. But let the *verſe* be tranſlated into *proſe*, for *poeſy* does not belong to *grammar*.

IX. BY this time he will be able to *acquaint himſelf with ſome of the ſpecial emphaſis of ſpeech*, and the *peculiar idioms of the tongue*. He ſhould be taught alſo the ſpecial *beauties* and *ornaments* of the language: and this may be done partly by the help of authors who have collected ſuch *idioms*, and caſt them into an eaſy method, and partly by the judicious remarks which his inſtructor may make upon the authors which he reads, whereſoever ſuch peculiarities of ſpeech or ſpecial elegancies occur.

X. THOUGH the labour of learning all the *leſſons by heart*, that are borrowed from *poetical authors* which they conſtrue, is an unjuſt and unneceſſary impoſition upon the learner, yet he muſt take the pains to *commit to memory the moſt neceſſary, if not all the common rules of grammar*, with an example or two under each of them: and ſome of the ſelect and moſt uſeful periods or ſentences in the *Latin* or *Greek* author which he reads, may be learnt by heart, together with ſome of the choicer leſſons out of their poets; and ſometimes whole epiſodes out of *heroic* poems, &c. as well as whole odes among the *lyrics* may deſerve this honour.

XI. LET this be always carefully obſerved, that *the learners perfectly underſtand the ſenſe as well as the language of all thoſe rules, leſſons or paragraphs which they attempt to commit to memory.* Let the teacher poſſeſs them of their true meaning, and then the labour will become eaſy and pleaſant: whereas to impoſe on a child to get by heart a *long ſcroll of unknown phraſes or words, without any ideas under them,* is a piece of uſeleſs tyranny, a cruel impoſition, and a practice fitter for a jack-daw or a parrot, than for any thing that wears the ſhape of man.

XII. AND here, I think, I have a fair occaſion given me to conſider that *queſtion* which has been often debated in converſation, *viz. Whether the teaching a ſchool full of boys to learn* Latin *by the Heathen poets,* as *Ovid* in his *Epiſtles,* and the ſilly fables of his *Metamorphoſis*; *Horace, Juvenal,* and *Martial* in their impure odes, ſatires and epigrams, *&c.* is ſo proper and agreeable a practice in a *Chriſtian* country?

XIII. (1.) I GRANT the *language and ſtyle of thoſe men who wrote in their own native tongue, muſt be more pure and perfect* in ſome nice elegancies and peculiarities, than modern writers of other nations who have imitated them; and it is owned alſo, that the beauties of their poeſy may much excel: but in either of theſe things, boys cannot

cannot be ſuppoſed to be much improved or injured by one or the other,

XII. (2.) IT ſhall be confeſt too, that *modern poets in every living language, have brought into their works ſo many words, epithets, phraſes, and metaphors,* from the *heathen* fables and ſtories of their gods and heroes, that in order to underſtand theſe modern writers, it is neceſſary to know a little of thoſe ancient follies: but it may be anſwered, that a good dictionary, or ſuch a book as the *Pantheon*, or hiſtory of thoſe *Gentile deities*, &c. may give ſufficient information of thoſe ſtories, ſo far as they are neceſſary and uſeful to ſchool-boys.

XV. (3.) I WILL grant yet further, that lads who are deſigned to make great ſcholars or divines, may by reading theſe *Heathen* poets, be taught better to *underſtand the writings of the ancient fathers againſt the Heathen religion*; and they learn here *what ridiculous fooleries the Gentile nations believed* as the articles of their faith, *what wretched and foul idolatries they indulged and practiſed as duties of religion, for want of the light of divine revelation*. But this perhaps may be learnt as well either by the *Pantheon*, or ſome other collection, at ſchool; or after they have left the ſchool, they may read what their own inclinations lead them to, and whatſoever of this kind may be really uſeful for them.

XVI. BUT the great queſtion is, *Whether all theſe advantages which have been mentioned, will compenſate for the long months and years that are waſted among their incredible and trifling romances, their falſe and ſhameful ſtories of the gods and goddeſſes and their amours, and the lewd heroes and vicious poets of the Heathen world?* Can theſe idle and ridiculous tales be of any real and ſolid advantage in human life? Do they not too often defile the mind with vain, miſchievous and impure ideas? Do they not ſtick long upon the fancy, and leave an unhappy influence upon youth? Do they not tincture the imagination with folly and vice very early, and prevent it from all that is good and holy?

XVII. UPON the whole ſurvey of things it is my opinion, that for almoſt all boys who learn this tongue, it would be much ſafer to be taught *Latin poeſy* (as ſoon and as far as they can need it) from thoſe excellent tranſlations of *David*'s *pſalms*, which are given us by *Buchanan* in the various meaſures of *Horace*; and the lower claſſes had better read Dr. *Johnſton*'s tranſlation of theſe pſalms, another elegant writer of the *Scots* nation, inſtead of *Ovid*'s *Epiſtles*; for he has turned the ſame pſalms perhaps with greater elegancy into *elegiac* verſe, whereof the learned *W. Benſon*, Eſq; has lately publiſhed a noble edition, and I

hear that theſe Pſalms are honoured with an increaſing uſe in the ſchools of *Holland* and *Scotland*. A ſtanza, or a couplet of theſe writers would now and then ſtick upon the minds of youth, and would furniſh them infinitely better with pious and moral thoughts, and do ſomething towards making them good men and Chriſtians.

XVIII. A LITTLE book collected from the *Pſalms* of both theſe tranſlators, *Buchanan* and *Johnſton*, and a few other *Chriſtian* poets, would be of excellent uſe for ſchools to begin their inſtructions in *Latin poeſy*; and I am well aſſured this would be richly ſufficient for all thoſe in lower rank, who never deſign a learned profeſſion, and yet cuſtom has fooliſhly bound them to learn that language.

BUT leſt it ſhould be thought hard to caſt *Horace* and *Virgil*, *Ovid* and *Juvenal* entirely out of the ſchools, I add, if here and there a few lyric odes, or pieces of ſatires, or ſome epiſodes of *heroic* verſe, with here and there an epigram of *Martial*, all which ſhall be clear and pure from the ſtains of vice and impiety, and which may inſpire the mind with noble ſentiments, fire the fancy with bright and warm ideas, or teach leſſons of morality and prudence, were choſen out of thoſe ancient *Roman* writers for the uſe of the ſchools, and were collected and printed in one moderate

volume, or two at the moſt, it would be abundantly ſufficient proviſion out of the *Roman* poets for the inſtruction of boys in all that is neceſſary in that age of life.

SURELY *Juvenal* himſelf would not have the face to vindicate the maſters who teach boys his 6th *ſatire*, and many paragraphs of ſeveral others, when he himſelf has charged us,

Nil dictu fœdum, viſuque hæc limina tangat
Intra quæ puer eſt. Sat. 14.

Suffer no lewdneſs, nor indecent ſpeech,
Th' apartment of the tender youth to reach.
DRYDEN.

Thus far in anſwer to the foregoing queſtion.

But I retire; for Mr. *Clarke* of *Hull*, in his treatiſe of *Education*, and Mr. *Philips* preceptor to the duke of *Cumberland*, have given more excellent directions for learning *Latin*.

XIX. WHEN a language is learnt, *if it be of any uſe at all, it is pity it ſhould be forgotten again*, It is proper therefore to take all juſt opportunities *to read ſomething frequently in that language*, when other neceſſary and important ſtudies will give you leave. As in learning any tongue, *dictionaries* which contain *words* and *phraſes* ſhould

ſhould be always at hand: ſo they ſhould be ever kept within reach by perſons who would remember a tongue which they have learnt. Nor ſhould we at any time content ourſelves with a doubtful gueſs at the ſenſe or meaning of any words which occur, but conſult the *dictionary*, which may give us certain information, and thus ſecure us from miſtake. It is meer ſloth which makes us content ourſelves with uncertain gueſſes; and indeed this is neither ſafe nor uſeful for perſons who would learn any language or ſcience, or have a deſire to retain what they have acquired.

XX. WHEN you have learnt one or many languages ever ſo perfectly, take heed of priding yourſelf in theſe acquiſitions: they are but mere treaſures of *words*, or inſtruments of true and ſolid knowledge, and whoſe chief deſign is to lead us into an acquaintance with *things*, or to enable us the more eaſily to convey thoſe ideas, or that knowledge to others. An acquaintance with the various tongues is nothing elſe, but a relief againſt the miſchief which the building of *Babel* introduced: and were I maſter of as many languages as were ſpoken at *Babel*, I ſhould make but a poor pretence to true learning or knowledge, if I had not clear and diſtinct *ideas*, and uſeful notions in my head under the *words* which my tongue could pronounce. Yet ſo unhappy

happy a thing is human nature, that this ſort of knowledge of ſounds and ſyllables is ready to puff up the mind with vanity, more than the moſt valuable and ſolid improvements of it. The pride of a grammarian or a critic, generally exceeds that of a philoſopher.

CHAP. VIII.

Of enquiring into the Senſe and Meaning of any Writer or Speaker, and eſpecially the Senſe of the Sacred writings.

IT is a great unhappineſs that there is ſuch an ambiguity in words and forms of ſpeech, that the ſame ſentence may be drawn into different ſignifications; whereby it comes to paſs, that it is difficult ſometimes for the reader exactly to hit upon the ideas which the writer or ſpeaker had in his mind. Some of the beſt *rules* to direct us herein are ſuch as theſe.

I. BE well acquainted with the *tongue* itſelf, or *language* wherein the author's mind is expreſt. Learn not only the true meaning of each word, but the ſenſe which thoſe

thoſe words obtain when placed in ſuch a particular *ſituation* and *order*. Acquaint yourſelf with the peculiar *power and emphaſis* of the ſeveral modes of ſpeech, and the various idioms of the tongue. The *ſecondary ideas* which cuſtom hath ſuperadded to many words, ſhould alſo be known, as well as the particular and *primary meaning* of them, if we would underſtand any writer. See *Logic*, Part I. Chap. 4. § 3.

II. CONSIDER the ſignification of thoſe words and phraſes, more eſpecially in the *ſame nation*, or near the ſame *age* in which that writer lived, and in what ſenſe they are uſed by authors of the *ſame nation, opinion, ſect, party*, &c.

UPON this account, we may learn to interpret ſeveral phraſes of the New Teſtament out of that verſion of the *Hebrew* Bible into *Greek*, which is called the *Septuagint*; for though that verſion be very imperfect and defective in many things, yet it ſeems to me evident, that the holy writers of the New Teſtament made uſe of that verſion many times in their citation of texts out of the Bible.

III. COMPARE the words and phraſes in *one place of an author*, with the ſame or kindred words and phraſes uſed in *other places* of the ſame author, which are generally called *parellel places*; and as one expreſſion explains another which is like it,

ſo ſometimes a contrary expreſſion will explain its contrary. Remember always, that a writer beſt interprets himſelf; and as we believe the Holy Spirit to be the ſupreme agent in the writings of the Old Teſtament and the New, he can beſt explain himſelf. Hence that theological rule ariſes, that *ſcripture is the beſt interpreter of ſcripture*; and therefore *concordances* which ſhew us parallel places, are of excellent uſe for interpretation.

IV. CONSIDER the *ſubject* of which the author is treating, and by comparing other places where he treats of the *ſame ſubject*, you may learn his ſenſe in the place which you are reading, though ſome of the terms which he uſes in thoſe two places may be very different.

AND on the other hand, if the author uſes the ſame words where the ſubject of which he treats is *not juſt the ſame*, you cannot learn his ſenſe by comparing thoſe two places, though the mere words may ſeem to agree: for ſome authors, when they are treating of a quite *different ſubject*, may uſe perhaps the *ſame words* in a very *different ſenſe*, as St. *Paul* does the words *faith*, and *law*, and *righteouſneſs*.

V. OBSERVE the *ſcope and deſign* of the writer: enquire into his aim and end in that book, or ſection, or paragraph, which will help to explain particular ſentences: for

for we ſuppoſe a wiſe and judicious writer directs his expreſſions generally toward his deſigned end.

VI. WHEN an author ſpeaks of any ſubject *occaſionally*, let his ſenſe be explained by thoſe places where he treats of it *diſtinctly* and *profeſſedly*: where he treats of any ſubject in *myſtical* or *metaphorical* terms, explain them by other places, where he treats of the ſame ſubject in terms that are *plain and literal*: where he ſpeaks in an *oratorical*, *affecting*, or *perſuaſive* way, let this be explained by other places where he treats of the ſame theme in a *doctrinal* or *inſtructive* way: where the author ſpeaks more ſtrictly, and *particularly* on any theme, it will explain the more looſe and *general* expreſſions: where he treats more *largely*, it will explain the *ſhorter hints* and *brief intimations*: and whereſoever he writes more *obſcurely*, ſearch out ſome more *perſpicuous* paſſages in the ſame writer, by which to determine the ſenſe of that obſcurer language.

VII. CONSIDER not only the *perſon* who is introduced *ſpeaking*, but the *perſons to whom* the ſpeech is directed, the circumſtances of *time* and *place*, the *temper and ſpirit of the ſpeaker*, as well as the *temper and ſpirit of the hearers*: in order to interpret ſcripture well, there needs a good acquaintance with the *Jewiſh* cuſtoms, ſome

ſome knowledge of the antient *Roman* and *Greek* times and manners, which ſometimes ſtrike a ſtrange and ſurpriſing light upon paſſages which before were very obſcure.

VIII. IN particular propoſitions, the ſenſe of an author may be ſometimes known by the *inferences* which he draws from them; and all thoſe ſenſes may be excluded which will not allow of that interference.

NOTE, This *rule* indeed is not always certain in reading and interpreting human authors, becauſe they may miſtake in drawing their inferences; but in explaining ſcripture it is a *ſure rule*; for the ſacred and inſpired writers always make juſt inferences from their own propoſitions. Yet even in them we muſt take heed we do not miſtake an alluſion for an inference, which is many times introduced almoſt in the ſame manner.

IX. IF it be a matter of controverſy, the true ſenſe of the author is ſometimes known by the *objections* that are brought againſt it. So we may be well aſſured, the Apoſtle ſpeaks againſt our *juſtification in the ſight of God by our own works of holineſs*, in the 3*d*, 4*th* and 5*th* chapters of the Epiſtle to the *Romans*, becauſe of the *objection* brought againſt him in the beginning of the 6*th* chapter, (*viz.*) *What ſhall we ſay then? ſhall we continue in ſin that grace may abound?* Which objection could never have been raiſed,

raiſed, if he had been proving our *juſtification by our own works of righteouſneſs.*

X. IN matters of diſpute, take heed of *warping* the ſenſe of the writer to *your own opinion*, by any latent prejudices of *ſelf-love* and a *party ſpirit*. It is this reigning principle of prejudice and party, that has given ſuch a variety of ſenſes both to the ſacred writers and others, which would never have come into the mind of the reader, if he had not laboured under ſome ſuch prepoſſeſſions.

XI. FOR the ſame reaſon take heed of the prejudices of *paſſion, malice, envy, pride* or *oppoſition* to an author, whereby you may be eaſily tempted to put a *falſe and invidious ſenſe* upon his words. Lay aſide therefore a carping ſpirit, and read even an adverſary with attention and diligence, with an honeſt deſign to find out his true meaning; do not ſnatch at little lapſes and appearances of miſtake, in oppoſition to his declared and avowed meaning; nor impute any ſenſe or opinion to him which he denies to be his opinion, unleſs it be proved by the moſt plain and expreſs lauguage.

LASTLY, Remember that you *treat every author, writer or ſpeaker, juſt as you yourſelves would be willing to be treated by others*, who are ſearching out the meaning of what you write or ſpeak: and maintain upon

upon your ſpirit an awful ſenſe of the preſence of God, who is the judge of hearts, and will puniſh thoſe who by a baſe and diſhoneſt turn of mind wilfully pervert the meaning of the ſacred writers, or even of common authors, under the influence of culpable prejudices. See more, *Logic*, Part I. Chap. 6. § 3. *Directions concerning the Definition of Names.*

CHAP. IX.

Rules of IMPROVEMENT *by* CONVERSATION.

IF we would improve our minds by *converſation*, it is a great happineſs *to be acquainted with perſons wiſer than ourſelves.* It is a piece of uſeful advice therefore, to get the favour of their converſation frequently, as far as circumſtances will allow: and if they happen to be a little reſerved, uſe all obliging methods to draw out of them what may increaſe your own knowledge.

II. WHATSOEVER company you are in, *waſte not the time in trifle and impertinence.* If you ſpend ſome hours amongſt children, talk with them according to their capacity;

capacity; mark the young buddings of infant reaſon; obſerve the different motions and diſtinct workings of the animal and the mind, as far as you can diſcern them; take notice by what degrees the little creature grows up to the uſe of his reaſoning powers, and what early prejudices beſet and endanger his underſtanding. By this means you will learn how to addreſs yourſelf to children for their benefit, and perhaps you may derive ſome uſeful philoſophemes or theorems, for your own entertainment.

III. IF you happen to be in company with a *merchant* or a *ſailor*, a *farmer* or a *mechanic*, a *milk-maid* or a *ſpinſter*, *lead them into a diſcourſe of the matters of their own peculiar province or profeſſion*; for every one knows, or ſhould know, his own buſineſs beſt. In this ſenſe a common mechanic is wiſer than a philoſopher. By this means you may gain ſome improvement in knowledge from every one you meet.

IV. *CONFINE not yourſelf always to one ſort of company*, or to perſons of the ſame party or opinion, either in matters of learning, religion, or the civil life, leſt if you ſhould happen to be nurſed up or educated in early miſtake, you ſhould be confirmed and eſtabliſhed in the ſame miſtake, by converſing only with perſons of the ſame ſentiments. A free and general converſation with men of very various countries,

and

and of different parties, opinions, and practices (ſo far as it may be done ſafely) is of excellent uſe to undeceive us in many wrong judgments which we may have framed, and to lead us into juſter thoughts. It is ſaid, when the King of *Siam*, near *China*, firſt converſed with ſome *European* merchants, who ſought the favour of trading on his coaſt, he enquired of them ſome of the common appearances of ſummer and winter in their country; and when they told him of water growing ſo hard in their rivers, that men, and horſes, and laden carriages paſſed over it, and that rain ſometimes fell down as white and light as feathers, and ſometimes almoſt as hard as ſtones, he would not believe a ſyllable they ſaid, for *ice*, *ſnow*, and *hail*, were names and things utterly unknown to him, and to his ſubjects in that hot climate: he renounced all traffic with ſuch ſhameful liars, and would not ſuffer them to trade with his people. See here the natural effects of groſs ignorance.

CONVERSATION with foreigners on various occaſions, has a happy influence to enlarge our minds, and to ſet them free from many errors and groſs prejudices we are ready to imbibe concerning them. *Domicillus* has never travelled five miles from his mother's chimney, and he imagines all outlandiſh men are *Papiſhes*, and worſhip nothing but a croſs. *Tityrus* the ſhepherd, was

was bred up all his life in the country, and never ſaw *Rome*; he fancied it to be only a huge village, and was therefore infinitely ſurpriſed to find ſuch palaces, ſuch ſtreets, ſuch glittering treaſures and gay magnificence, as his firſt journey to the city ſhewed him, and with wonder he confeſſes his folly and miſtake.

So *Virgil* introduces a poor ſhepherd,

Urbem quam dicunt Romam, Melibœe, putavi
Stultus ego huic noſtræ ſimilem, quo ſæpe ſolemus
Paſtores ovium teneros depellere fœtus, &c.

Thus Engliſhed:

Fool that I was, I thought imperial Rome
Like market-towns, where once a week we come,
And thither drive our tender lambs from home.

CONVERSATION would have given *Tityrus* a better notion of *Rome*, though he had never happened to travel thither.

V. *IN mixed company among acquaintance and ſtrangers, endeavour to learn ſomething from all. Be ſwift to hear*, but *be cautious of your tongue*, leſt you betray your ignorance, and perhaps offend ſome of thoſe who are preſent too. The ſcripture ſeverely cenſures thoſe who *ſpeak evil of the things they know not*. Acquaint yourſelf therefore ſometimes

ſometimes with perſons and parties which are far diſtant from your common life and cuſtoms: this is a way whereby you may form a wiſer opinion of men and things. *Prove all things, and hold faſt that which is good*, is a divine rule, and it comes from the Father of light and truth. But young perſons ſhould practiſe it indeed with due limitation and under the eye of their elders.

VI. *BE not frighted nor provoked at opinions different from your own.* Some perſons are ſo confident they are in the right, that they will not come within the hearing of any notions but their own: they canton out to themſelves a little province in the intellectual world, where they fancy the light ſhines, and all the reſt is darkneſs. They never venture into the ocean of knowledge, nor ſurvey the riches of other minds, which are as ſolid and as uſeful, and perhaps are finer gold than what they ever poſſeſſed. Let not men imagine there is no certain truth but in the ſciences which they ſtudy, andamongſt that party in which they were born and educated.

VII. *BELIEVE that it is poſſible to learn ſomething from perſons much below yourſelf.* We are all ſhort-ſighted creatures; our views are alſo narrow and limited; we often ſee but one ſide of a matter, and do not extend our ſight far and wide enough

to

to reach every thing that has a connexion with the thing we talk of: *we ſee but in part, and know but in part*, therefore it is no wonder we form not right concluſions, becauſe we do not ſurvey the whole of any ſubject or argument. Even the proudeſt admirer of his own parts might find it uſeful to conſult with others, though of inferior capacity and penetration. We have a different proſpect of the ſame thing (if I may ſo ſpeak) according to the different poſition of our underſtandings towards it: a weaker man may ſometimes light on notions which have eſcaped a wiſer, and which the wiſer man might make a happy uſe of, if we would condeſcend to take notice of them.

VIII. IT is of conſiderable advantage when we are purſuing any difficult point of knowledge, *to have a ſociety of ingenious correſpondents at hand, to whom we may propoſe it:* for every man has ſomething of a different genius and a various turn of mind, whereby the ſubject propoſed will be ſhown in all its lights, it will be repreſented in all its forms, and every ſide of it be turned to view, that a juſter judgment may be framed.

IX. To make converſation more valuable and uſeful, whether it be in a deſigned or accidental viſit, among perſons of the ſame or of different ſexes, after the neceſſary ſalutations are finiſhed, and the ſtream of com-

mon talk begins to heſitate, or runs flat and low, let ſome one perſon take a book which may be agreeable to the whole company, and by common conſent let him read in it ten lines, or a paragraph or two, or a few pages, till ſome word or ſentence gives an occaſion for any of the company to offer a thought or two relating to that ſubject. Interruption of the reader ſhould be no blame, for converſation is the buſineſs; whether it be to confirm what the author ſays, or to improve it, to enlarge upon or to correct it, to object againſt it, or to aſk any queſtion that is a-kin to it; and let every one that pleaſe add their opinion and promote the converſation. When the diſcourſe ſinks again, or diverts to trifles, let him that reads purſue the page, and read on further paragraphs or pages, till ſome occaſion is given by a word or ſentence for a new diſcourſe to be ſtarted, and that with the utmoſt eaſe and freedom. Such a method as this would prevent the hours of a viſit from running all to waſte; and by this means even among ſcholars, they will ſeldom find occaſion for that too juſt and bitter reflection, *I have loſt my time in the company of the learned.*

BY ſuch practice as this, young ladies may very honourably and agreeably improve their hours, while one applies herſelf to reading, the others employ their attention,

even

even among the various artifices of the needle: but let all of them make their occaſional remarks or enquiries. This will guard a great deal of that precious time from modiſh trifling impertinence or ſcandal, which might otherwiſe afford matter for painful repentance.

OBSERVE this *rule in general*, whenſoever it lies in your power to lead the converſation, *let it be directed to ſome profitable point of knowledge or practice*, ſo far as may be done with decency; and let not the diſcourſe and the hours be ſuffered to run looſe without aim or deſign: and when a ſubject is ſtarted, paſs not haſtily to another, before you have brought the preſent theme or diſcourſe to ſome tolerable iſſue, or a joint conſent to drop it.

X. *ATTEND with ſincere diligence while any one of the company is declaring his ſenſe of the queſtion propoſed*; hear the argument with patience, though it differ ever ſo much from your ſentiments, for you yourſelf are very deſirous to be heard with patience by others who differ from you. Let not your thoughts be active and buſy all the while to find out ſomething to contradict, and by what means to oppoſe the ſpeaker, eſpecially in matters which are not brought to an iſſue. This is a frequent and unhappy temper and practice. You ſhould rather be intent and ſolicitous to take up the mind

and meaning of the ſpeaker, zealous to ſeize and approve all that is true in his diſcourſe; nor yet ſhould you want courage to oppoſe where it is neceſſary; but let your modeſty and patience and a friendly temper, be as conſpicuous as your zeal.

XI. *WHEN a man ſpeaks with much freedom and eaſe, and gives his opinion in the plaineſt language of common ſenſe, do not preſently imagine you ſhall gain nothing by his company.* Sometimes you will find a perſon who in his converſation or his writings delivers his thoughts in ſo plain, ſo eaſy, ſo familiar and perſpicuous a manner, that you both underſtand and aſſent to every thing he ſaith, as faſt as you read or hear it: hereupon ſome hearers have been ready to conclude in haſte, ſurely *this man ſaith none but common things, I knew as much before, or I could have ſaid all this myſelf.* This is a frequent miſtake. *Pellucido* was a very great genius; when he ſpoke in the ſenate he was wont to convey his ideas in ſo ſimple and happy a manner, as to inſtruct and convince every hearer, and to inforce the conviction through the whole illuſtrious aſſembly; and that with ſo much evidence, that you would have been ready to wonder, that every one who ſpoke had not ſaid the ſame things: but *Pellucido* was the only man that could do it, the only ſpeaker who had attained

attained this art and honour. Such is the writer of whom *Horace* would ſay,

———*Ut ſibi quivis,*
Speret idem, ſudet multum, fruſtraque laboret
Auſus idem. De Art. Poët.

Smooth be your ſtyle, and plain and natural,
To ſtrike the ſons of Wapping *or* Whitehall.
While others think this eaſy to attain,
Let them but try, and with their utmoſt pain
They'll ſweat and ſtrive to imitate in vain.

XII. IF any thing ſeem dark in the diſcourſe of your companion, ſo that you have not a clear idea of what is ſpoken, *endeavour to obtain a clearer conception of it by a decent manner of enquiry.* Do not charge the ſpeaker with obſcurity, either in his ſenſe or his words, but intreat his favour to relieve your own want of penetration, or to add an enlightening word or two, that you may take up his whole meaning.

IF difficulties ariſe in your mind, and conſtrain your diſſent to the things ſpoken, *repreſent what objections ſome perſons would be ready to make againſt the ſentiments of the ſpeaker,* without telling him you oppoſe. This manner of addreſs carries ſomething more modeſt and obliging in it, than to appear to raiſe objections of your own by way of contradiction to him that ſpoke.

XIII. WHEN you are forced to differ from him who delivers his ſenſe on any point, yet *agree as far as you can,* and *repreſent how far you agree*; and if there be any room for it, explain the words of the ſpeaker in ſuch a ſenſe to which you can in general aſſent and ſo agree with him: or at leaſt by a ſmall addition or alteration of his ſentiments ſhew your own ſenſe of things. It is the practice and delight of a candid hearer, to make it appear how unwilling he is to differ from him that ſpeaks. Let the ſpeaker know that it is nothing but truth conſtrains you to oppoſe him, and let the difference be always expreſt in few and civil, and choſen words, ſuch as give the leaſt offence.

AND be careful always to take *Solomon*'s rule with you, and let your correſpondent fairly finiſh his ſpeech before you reply; for *he that anſwereth a matter before he heareth it,* it is *folly and ſhame unto him.* Prov. xviii. 13.

A LITTLE watchfulneſs, care and practice in younger life, will render all theſe things more eaſy, familiar, and natural to you, and will grow into habit.

XIV. As you ſhould carry about with you a conſtant and ſincere ſenſe of your own ignorance, *ſo you ſhould not be afraid nor aſhamed to confeſs this ignorance,* by taking all proper opportunities to *aſk* and *enquire* for

for farther information; whether it be the meaning of a word, the nature of a thing, the reaſon of a propoſition, the cuſtom of a nation, *&c.* never remain in ignorance for want of aſking.

MANY a perſon had arrived at ſome conſiderable degree of knowledge, if he had not been full of ſelf-conceit, and imagined that he had known enough already, or elſe was aſhamed to let others know that he was unacquainted with it. God and man are ready to teach the meek, the humble, and the ignorant; but he that fancies himſelf to know any particular ſubject well, or that will not venture to aſk a queſtion about it, ſuch a one will not put himſelf into the way of improvement by enquiry and diligence, A *fool* may be *wiſer in his own conceit than ten men who can render a reaſon*, and ſuch a one is very likely to be an everlaſting fool; and perhaps alſo it is a ſilly ſhame renders his folly incurable.

Stultorum incurata pudor malus ulcera celat.
Hor. Epiſt. 16. Lib. I.

In *Engliſh* thus,
If fools have ulcers, and their pride conceal'em;
They muſt have ulcers ſtill, for none can heal'em.

XI. *BE not too forward*, eſpecially in the younger part of life, *to determine any*

queſtion in company with an infallible and peremptory ſentence, nor ſpeak with aſſuming airs, and with a deciſive tone of voice. A young man in the preſence of his elders ſhould rather hear and attend, and weigh the arguments which are brought for the proof or refutation of any doubtful propoſition: and when it is your turn to ſpeak, propoſe your thoughts rather in way of enquiry. By this means your mind will be kept in a fitter temper to receive truth, and you will be more ready to correct and improve your own ſentiments, where you have not been too poſitive in affirming them. But if you have magiſterially decided the point, you will find a ſecret unwillingneſs to retract, though you ſhould feel an inward conviction that you were in the wrong.

XVI. IT is granted indeed, that a ſeaſon may happen, when ſome bold pretender to ſcience, may aſſume haughty and poſitive airs to aſſert and vindicate a groſs and dangerous error, or to renounce and vilify ſome very important truth: and if he has a popular talent of talking, and there be no remonſtrance made againſt him, the company may be tempted too eaſily to give their aſſent to the impudence and infallibility of the preſumer. They may imagine a propoſition ſo much vilified can never be true, and that a doctrine which is ſo boldly cenſured and renounced can never be defended.

Weak

Weak minds are too ready to perſuade themſelves, that a man would never talk with ſo much aſſurance unleſs he were certainly in the right and could well maintain and prove what he ſaid. By this means truth itſelf is in danger of being betrayed or loſt, if there be no oppoſition made to ſuch a pretending talker.

Now in ſuch a caſe even a wiſe and a modeſt man may aſſume airs too, and repel inſolence with its own weapons. There is a time as *Solomon* the wiſeſt of men teaches us, when *a fool ſhould be anſwered according to his folly, leſt he be wiſe in his own conceit*, and leſt others too eaſily yield up their faith and reaſon to his imperious dictates. Courage and poſitivity are never more neceſſary than on ſuch an occaſion. But it is good to join ſome argument with them of real and convincing force, and let it be ſtrongly pronounced too.

WHEN ſuch a reſiſtance is made, you ſhall find ſome of theſe bold talkers will draw in their horns, when their fierce and feeble puſhes againſt truth and reaſon are repelled with puſhing and confidence. It is pity indeed that truth ſhould ever need ſuch ſort of defences; but we know that a triumphant aſſurance hath ſometimes ſupported groſs falſhoods, and a whole company have been captivated to error by this means, till ſome man with equal aſſurance has

has reſcued them. It is pity that any momentous point of doctrine ſhould happen to fall under ſuch reproaches, and require ſuch a mode of vindication: though if I happen to hear it, I ought not to turn my back and ſneak off in ſilence, and leave the truth to lie baffled, bleeding and ſlain. Yet I muſt confeſs, I ſhould be glad to have no occaſion ever given me to fight with any man at this ſort of weapons, even though I ſhould be ſo happy as to ſilence his inſolence, and obtain an evident victory.

XVII. *BE not fond of diſputing every thing* PRO and CON, nor indulge yourſelf to ſhew your talent of attacking and defending. A *logic* which teaches nothing elſe, is little worth. This temper and practice will lead you juſt ſo far out of the way of knowledge, and divert your honeſt enquiry after the truth which is debated or ſought. In ſet diſputes, every little ſtraw is often laid hold on to ſupport our own cauſe; every thing that can be drawn in any way to give colour to our argument is advanced, and that perhaps with vanity and oſtentation. This puts the mind out of a proper poſture to ſeek and receive the truth.

XVIII. *Do not bring a warm party-ſpirit into free converſation,* which is deſigned for mutual improvement in the ſearch of truth. Take heed of allowing yourſelf in thoſe

thoſe ſelf-ſatisfied aſſurances, which keep the doors of the underſtanding barred faſt againſt the admiſſion of any new ſentiments. Let your ſoul be ever ready to hearken to further diſcoveries, from a conſtant and ruling conſciouſneſs of our preſent fallible and imperfect ſtate; and make it appear to your friends, that it is no hard taſk for you to learn and pronounce thoſe little words, *I was miſtaken*, how hard ſoever it be for the bulk of mankind to pronounce them.

XIX. As you may ſometimes raiſe enquiries for your own inſtruction and improvement, and draw out the learning, wiſdom and fine ſentiments of your friends, who perhaps may be too reſerved or modeſt; ſo at other times if you perceive a perſon unſkilful in the matter of debate, *you may by queſtions* aptly propoſed in the *Socratic* method, *lead him into a clearer knowledge of the ſubject:* then you become his inſtructor in ſuch a manner as may not appear to make yourſelf his ſuperior.

XX. *TAKE heed of affecting always to ſhine in company above the reſt*, and to diſplay the riches of your own underſtanding or your oratory, as though you would render yourſelf admirable to all that are preſent. This is ſeldom well taken in polite company; much leſs ſhould you uſe ſuch forms of ſpeech as would inſinuate the ignorance

norance or dulneſs of thoſe with whom you converſe.

XXI. THOUGH you ſhould not affect to flouriſh in a copious harangue and diffuſive ſtyle in company, yet *neither ſhould you rudely interrupt and reproach him that happens to uſe it:* but when he has done ſpeaking, reduce his ſentiments into a more contracted form; not with a ſhew of correcting, but as one who is doubtful whether you hit upon his true ſenſe or no. Thus matters may be brought more eaſily from a wild confuſion into a ſingle point, queſtions may be ſooner determined, and difficulties more eaſily removed.

XXII. *BE not ſo ready to charge ignorance, prejudice, and miſtake upon others,* as you are to ſuſpect yourſelf of it: and in order to ſhow how free you are from prejudices, learn to bear contradiction with patience: let it be eaſy to you to hear your own opinion ſtrongly oppoſed, eſpecially in matters which are doubtful and diſputable amongſt men of ſobriety and virtue. Give a patient hearing to arguments on all ſides, otherwiſe you give the company occaſion to ſuſpect that it is not the evidence of truth has led you into this opinion, but ſome lazy anticipation of judgment; ſome beloved preſumption, ſome long and raſh poſſeſſion of a party ſcheme, in which you deſire

deſire to reſt undiſturbed. If your aſſent has been eſtabliſhed upon juſt and ſufficient grounds, why ſhould you be afraid to let the truth be put to the trial of argument?

XXIII. *BANISH utterly out of all converſation, and eſpecially out of all learned and intellectual conference, every thing that tends to provoke paſſion, or raiſe a fire in the blood.* Let no ſharp language, no noiſy exclamation, no ſarcaſms or biting jeſts be heard among you; no perverſe or invidious conſequences be drawn from each other's opinions, and imputed to the perſon: let there be no wilful perverſion of another's meaning; no ſudden ſeizure of a lapſed ſyllable to play upon it, nor any abuſed conſtruction of an innocent miſtake: ſuffer not your tongue to inſult a modeſt opponent that begins to yield; let there be no crowing and triumph, even where there is evident victory on your ſide. All theſe things are enemies to friendſhip, and the ruin of free converſation. The impartial ſearch of truth requires all calmneſs and ſerenity, all temper and candour: mutual inſtruction can never be attained in the midſt of paſſion, pride and clamour, unleſs we ſuppoſe in the midſt of ſuch a ſcene there is a loud and penetrating lecture read by both ſides on the folly and ſhameful infirmities of human nature.

XXIV.

XXIV. WHENSOEVER therefore any unhappy word ſhall ariſe in company that might give you a reaſonable diſguſt, *quaſh the riſing reſentment, be it ever ſo juſt,* and command your ſoul and your tongue into ſilence, leſt you cancel the hopes of all improvement for that hour, and transform the learned converſation into the mean and vulgar form of reproaches and railing. The man who begun to break the peace in ſuch a ſociety, will fall under the ſhame and conviction of ſuch a ſilent reproof, if he has any thing ingenuous about him. If this ſhould not be ſufficient, let a grave admonition, or a ſoft and gentle turn of wit, with an air of pleaſantry, give the warm diſputer an occaſion to ſtop the progreſs of his indecent fire, if not to retract the indecency and quench the flame.

XXV. *INURE yourſelf to a candid and obliging manner in all your converſation, and acquire the art of pleaſing addreſs, even when you teach as well as when you learn,* and when you oppoſe as well as when you aſſert or prove. This degree of politeneſs is not to be attained without a diligent attention to ſuch kind of directions as are here laid down, and a frequent exerciſe and practice of them.

XXVI. IF you would know *what ſort of companions you ſhould ſelect for the cultivation and advantage of the mind,* the *general rule*

rule is, chooſe ſuch as by their brightneſs of parts and their diligence in ſtudy, or by their ſuperior advancement in learning, or peculiar excellency in any art, ſcience, or accompliſhment, divine or human, may be capable of adminiſtring to your improvement; and be ſure to maintain and keep ſome due regard to their moral character always, leſt while you wander in queſt of intellectual gain, you fall into the contagion of irreligion and vice. No wiſe man would venture into a houſe infected with the plague, in order to ſee the fineſt collections of any *virtuoſo in Europe*.

XXVII. NOR is it every ſober perſon of your acquaintance, no, nor every man of bright parts, or rich in learning, that is fit to engage in free converſation for the enquiry after truth. Let a perſon have ever ſo illuſtrious talents, yet *he is not a proper aſſociate for ſuch a purpoſe, if he lie under any of the following infirmities*.

(1.) IF he be exceedingly reſerved, and hath either no inclination to diſcourſe, or no tolerable capacity of ſpeech and language for the communication of his ſentiments.

(2.) IF he be haughty and proud of his knowledge, imperious in his airs, and is always fond of impoſing his ſentiments on all the company.

(3.) IF he be poſitive and dogmatical in his own opinions, and will diſpute to the end;

end; if he will reſiſt the brighteſt evidence of truth rather than ſuffer himſelf to be overcome, or yield to the plaineſt and ſtrongeſt reaſonings.

(4.) IF he be one who always affects to outſhine all the company, and delights to hear himſelf talk and flouriſh upon a ſubject, and make long harangues, while the reſt muſt be all ſilent and attentive.

(5.) IF he be a perſon of a whiffling and unſteady turn of mind, who cannot keep cloſe to a point of controverſy, but wanders from it perpetually, and is always ſolicitous to ſay ſomething, whether it be pertinent to the queſtion or no.

(6.) IF he be fretful and peeviſh, and given to reſentment upon all occaſions; if he knows not how to bear contradiction, or is ready to take things in a wrong ſenſe; if he is ſwift to feel a ſuppoſed offence, or to imagine himſelf affronted, and then break out into a ſudden paſſion, or retain ſilent and ſullen wrath.

(7.) IF he affect wit on all occaſions, and is full of his conceits and puns, quirks or quibbles, jeſts and repartees; theſe may agreeably entertain and animate an *hour of mirth*, but they have no place in the *ſearch after truth*.

(8.) IF he carry always about him a ſort of craft, and cunning, and diſguiſe, and act rather like a ſpy than a friend. Have

a care of ſuch a one as will make an ill uſe of freedom in converſation, and immediately charge hereſy upon you, when you happen to differ from thoſe ſentiments which authority or cuſtom has eſtabliſhed.

IN ſhort, you ſhould avoid the man in ſuch ſelect converſation, who practiſes any thing that is unbecoming the character of a ſincere, free and open ſearcher after truth.

Now though you may pay all the relative duties of life to perſons of theſe unhappy qualifications, and treat them with decency and love, ſo far as religion and humanity oblige you, yet take care of entering into a free debate of matters of truth or falſhood in their company, and eſpecially about the principles of religion. I confeſs, if a perſon of ſuch a temper happens to judge and talk well on ſuch a ſubject, you may hear him with attention, and derive what profit you can from his diſcourſe; but he is by no means to be choſen for a free conference in matters of enquiry and knowledge.

XXVIII. WHILE I would perſuade you to beware of ſuch perſons, and abſtain from too much freedom of diſcourſe amongſt them, it is very natural to infer that *you ſhould watch againſt the working of theſe evil qualities in your own breaſt*, if you happen to be tainted with any of them yourſelf. Men of learning and ingenuity will juſtly avoid your acquaintance, when

they find ſuch an unhappy and unſociable temper prevailing in you.

XXIX. To conclude: when you retire from company, then *converſe with yourſelf in ſolitude, and enquire what you have learnt for the improvement of your underſtanding, or for the rectifying your inclinations,* for the increaſe of your virtues, or the meliorating your conduct and behaviour in any future parts of life. If you have ſeen ſome of your company candid, modeſt, humble in their manner, wiſe and ſagacious, juſt and pious in their ſentiments, polite and graceful, as well as clear and ſtrong in their expreſſion, and univerſally acceptable and lovely in their behaviour, endeavour to impreſs the idea of all theſe upon your memory, and treaſure them up for your imitation.

XXX. IF the laws of reaſon, decency, and civility, have not been well obſerved amongſt your aſſociates, *take notice of thoſe defects for your own improvement:* and from every occurrence of this kind, remark ſomething to imitate or to avoid, in elegant, polite, and uſeful converſation. Perhaps you will find that ſome perſons preſent have really diſpleaſed the company by an exceſſive and too viſible an affectation to pleaſe, *i. e.* by giving looſe to ſervile flattery, or promiſcuous praiſe; while others were as ready to oppoſe and contradict

dict every thing that was ſaid. Some have deſerved juſt cenſure for a moroſe and affected taciturnity, and others have been anxious and careful leſt their ſilence ſhould be interpreted a want of ſenſe, and therefore they have ventured to make ſpeeches, though they had nothing to ſay which was worth hearing. Perhaps you will obſerve, that one was ingenious in his thoughts and bright in his language, but he was ſo top-full of himſelf, that he let it ſpill on all the company; that he ſpoke well indeed, but that he ſpoke too long, and did not allow equal liberty or time to his aſſociates. You will remark that another was full charged to let out his words before his friend had done ſpeaking, or impatient to the leaſt oppoſition to any thing he ſaid. You will remember that ſome perſons have talked at large, and with great confidence, of things which they underſtood not, and others counted every thing tedious and intolerable that was ſpoken upon ſubjects out of their ſphere, and they would fain confine the conference entirely within the limits of their own narrow knowledge and ſtudy. The errors of converſation are almoſt infinite.

XXXI. By a review of ſuch irregularities as theſe, you may learn to avoid thoſe follies and pieces of ill conduct which ſpoil good converſation, or make it leſs agree-

able and leſs uſeful; and by degrees you will acquire that delightful and eaſy manner of addreſs and behaviour in all uſeful correſpondences, which may render your company every where deſired and beloved; and at the ſame time among the beſt of your companions you may make the higheſt improvement in your own intellectual acquiſitions, that the diſcourſe of mortal creatures will allow, under all our diſadvantages in this ſorry ſtate of mortality. But there is a day coming, when we ſhall be ſeized away from this lower claſs in the ſchool of knowledge, where we labour under the many dangers and darkneſſes, the errors and the incumbrances of fleſh and blood, and our converſation ſhall be with angels, and more illuminated ſpirits in the upper regions of the univerſe.

CHAP.

CHAP. X.

Of DISPUTES.

I. UNDER the general head of *Converſation for the Improvement of the Mind*, we may rank the practice of *diſputing*; that is, when two or more perſons appear to maintain different ſentiments, and defend their own, or oppoſe the other's opinion in alternate diſcourſe by ſome methods of argument.

II. As theſe *diſputes* often ariſe in good earneſt, where the two contenders do really believe the different propoſitions which they ſupport; ſo ſometimes they are appointed as mere trials of ſkill in *academies*, or ſchools, by the ſtudents: ſometimes they are practiſed, and that with apparent fervour in courts of *judicature* by lawyers, in order to gain the fees of their different clients, while both ſides perhaps are really of the ſame ſentiment with regard to the cauſe which is tried.

III. IN common converſation, *diſputes* are often managed without any forms of regularity or order, and they turn to good or evil purpoſes, chiefly according to the temper of the diſputants. They may ſometimes be ſucceſsful to ſearch out truth,

ſometimes effectual to maintain truth, and convince the miſtaken, but at other times a diſpute is a mere ſcene of battle in order to victory and vain triumph.

IV. THERE are ſome few *general rules* which ſhould be obſerved in all debates whatſoever, if we would find out truth by them, or convince a friend of his error, even though they be not managed according to any ſettled forms of diſputation: and as there are almoſt as many opinions and judgments of things as there are perſons, ſo when ſeveral perſons happen to meet and confer together upon any ſubject, they are ready to declare their different ſentiments, and ſupport them by ſuch reaſonings as they are capable of. This is called *debating*, or *diſputing*, as is above deſcribed.

V. WHEN perſons begin a debate, *they ſhould always take care that they are agreed in ſome general principles or propoſitions*, which either more nearly or remotely affect the queſtion in hand; for otherwiſe they have no foundation or hope of convincing each other: they muſt have ſome common ground to ſtand upon while they maintain the conteſt.

WHEN they find they agree in ſome remote propoſitions, then let them ſearch farther, and enquire how near they approach to each others ſentiments; and whatſoever propoſitions they agree in, let theſe lay a foun-

foundation for the mutual hope of conviction. Hereby you will be prevented from running at every turn to ſome original and remote propoſitions and axioms, which practice both entangles and prolongs a diſpute. As for inſtance, if there was a debate propoſed betwixt a *proteſtant* and a *papiſt*, whether there be ſuch a place as *purgatory*? Let them remember that they both agree in this point, that *Chriſt has made ſatisfaction or atonement for ſin*, and upon this ground let them both ſtand, while they ſearch out the controverted doctrine of *purgatory* by way of conference or debate.

VI. THE *queſtion ſhould be cleared from all doubtful terms and needleſs additions*; and all things that belong to the *queſtion* ſhould be expreſſed in plain and intelligible language. This is ſo neceſſary a thing, that without it, men will be expoſed to ſuch ſort of ridiculous conteſts as was found one day between the two unlearned combatants *Sartor* and *Sutor*, who aſſaulted and defended the doctrine of *tranſubſtantiation* with much zeal and violence: but *Latino* happening to come into their company, and enquiring the ſubject of their diſpute, aſked each of them what he meant by that long hard word *tranſubſtantiation*. *Sutor* readily informed him that he underſtood *bowing at the name of Jeſus*. But *Sartor* aſſured him, that he meant nothing but *bowing at the*

high altar: "No wonder then, ſaid *Latino*, "that you cannot agree, when you neither "underſtand one another, nor the word "about which you contend." I think the whole family of the *Sartors* and *Sutors* would be wiſer if they avoided ſuch kind of debates, till they underſtood the terms better. But alas! even their wives carry on ſuch conferences; the other day one was heard in the ſtreet, explaining to her leſs learned neighbour the meaning of *metaphyſical* ſcience; and ſhe aſſured her, that as *phyſics* were medicines for the body, ſo *metaphyſics* was *phyſic* for the ſoul: upon this they went on to diſpute the point how far the *divine* excelled the *doctor*.

Auditum admiſſi riſum teneatis amici?
Ridentem dicere verum Quid vetat? Hor.

Can it be faulty to repeat
A dialogue that walk'd the ſtreet?
Or can my graveſt friends forbear
A laugh, when ſuch diſputes they hear?

VII. AND not only the *ſenſe and meaning* of the words uſed in the *queſtion* ſhould be ſettled and adjuſted between the diſputants, but the *preciſe point of enquiry ſhould be diſtinctly fixed*; the queſtion in debate ſhould be limited preciſely to its ſpecial extent, or declared to be taken in its more general

ral ſenſe. As for inſtance, If two men are contending *whether civil government be of divine right or no*; here it muſt be obſerved, the queſtion is not whether *monarchy* in one man, or a *republic* in multitudes of the people, or an *ariſtocracy* in a few of the chief, is appointed of God as neceſſary; but whether civil government in its moſt general ſenſe, or in any form whatſoever, is derived from the will and appointment of God? *Again*, The point of enquiry ſhould be limited further. Thus, the queſtion is not *whether government comes from the will of* God by the light of *revelation*, for that is granted; but *whether it is derived from the will of God* by the light of *reaſon too*. This ſort of ſpecification or limitation of the queſtion, hinders and prevents the diſputers from wandering away from the preciſe point of enquiry.

IT is this trifling humour or diſhoneſt artifice of changing the queſtion, and wandering away from the firſt point of debate, which gives endleſs length to diſputes, and cauſes both the diſputants to part without any ſatisfaction. And one chief occaſion of it is this; when one of the combatants feels his cauſe run low and fail, and is juſt ready to be confuted and demoliſhed, he is tempted to ſtep aſide to avoid the blow, and betakes him to a different queſtion; thus, if his adverſary be not well aware of him,

he

he begins to entrench himſelf in a new faſtneſs, and holds out the ſiege with a new artillery of thoughts and words. It is the pride of man which is the ſpring of this evil, and an unwillingneſs to yield up their own opinions, even to be overcome by truth itſelf.

VIII. KEEP this always therefore upon your mind, as an everlaſting rule of conduct in your debates to find out truth, that a *reſolute deſign, or even a warm affectation of victory, is the bane of all real improvement, and an effectual bar againſt the admiſſion of the truth which you profeſs to ſeek.* This works with a ſecret, but a powerful and miſchievous influence in every diſpute, unleſs we are much upon our guard. It appears in frequent converſation: every age, every ſex, and each party of mankind are ſo fond of being in the right, that they know not how to renounce this unhappy prejudice, this vain love of victory.

WHEN truth with bright evidence is ready to break in upon a diſputant, and to overcome his objections and miſtakes, how ſwift and ready is the mind to engage wit and fancy, craft and ſubtilty, to cloud and perplex and puzzle the truth, if poſſible? How eager is he to throw in ſome impertinent queſtion to divert from the main ſubject? How ſwift to take hold of ſome occaſional

occaſional word, thereby to lead the diſcourſe off from the point in hand? So much afraid is human nature of parting with its errors, and being overcome by truth. Juſt thus a hunted *hare* calls up all the ſhifts that nature hath taught her, ſhe treads back her mazes, croſſes and confounds her former track, and uſes all poſſible methods to divert the ſcent, when ſhe is in danger of being ſeized and taken. Let *puſs* practiſe what nature teaches; but would one imagine, that any rational being ſhould take ſuch pains to avoid truth, and to eſcape the improvement of his underſtanding?

IX. WHEN you come to a diſpute in order to find out truth, *do not preſume that you are certainly poſſeſſed of it before hand.* Enter the debate with a ſincere deſign of yielding to reaſon, on which ſide ſoever it appears. Uſe no ſubtle arts to cloud and entangle the queſtion; hide not yourſelf in doubtful words and phraſes; do not affect little ſhifts and ſubterfuges to avoid the force of an argument; take a generous pleaſure to eſpy the firſt riſing beams of truth, though it be on the ſide of your opponent: endeavour to remove the little obſcurities that hang about it, and ſuffer and encourage it to break out into open and convincing light; that while your opponent, perhaps, may gain the better of your reaſonings, yet you yourſelf may triumph over

over error, and I am ſure that is a much more valuable acquiſition and victory.

X. *WATCH narrowly in every diſpute, that your opponent does not lead you unwarily to grant ſome principle or propoſition, which will bring with it a fatal conſequence,* and lead you inſenſibly into this ſentiment, though it be far aſtray from the truth: and by this wrong ſtep you will be, as it were, plunged into dangerous errors before you are aware. *Polonides* in free converſation led *Incauto* to agree with him in this plain propoſition, that the *bleſſed God has too much juſtice in any caſe to puniſh* * *any being who is in itſelf innocent*; till he not only allowed it with an unthinking alacrity, but aſſerted it in moſt univerſal and unguarded terms. A little after, *Polonides* came in diſcourſe to commend the virtues, the innocence, and the piety of our bleſſed Saviour; and thence inferred, *it was impoſſible that God ſhould ever puniſh ſo holy a perſon who was never guilty of any crime:* then *Incauto* eſpied the ſnare, and found himſelf robbed and defrauded of the great doctrine of the atonement of the death of *Chriſt*, upon which he had placed his immortal hopes according to the goſpel. This taught him to bethink himſelf what a dangerous

* The word *puniſh* here ſignifies, *to bring ſome natural evil upon a perſon on account of moral evil done.*

conceſſion

conceſſion he had made in ſo univerſal a manner, that *God would never puniſh any being who was innocent*, and he ſaw it needful to recal his words, or to explain them better, by adding this reflection or limitation, *viz. Unleſs this innocent being were ſome way involved in another's ſin, or ſtood as a voluntary ſurety for the guilty:* by this limitation he ſecured the great and bleſſed doctrine of the ſacrifice of *Chriſt* for the ſins of men, and learnt to be more cautious in his conceſſions for time to come

Two months ago *Fatalio* had almoſt tempted his friend *Fidens* to leave off prayer, and to abandon his dependence on the providence of God in the common affairs of life, by obtaining of him a conceſſion of the like kind. Is it not evident to reaſon, ſays *Fatalio*, that God's immenſe ſcheme of tranſactions in the univerſe, was contrived and determined long before you and I were born? Can you imagine, my dear *Fidens*, that the bleſſed God changes his original contrivances, and makes new interruptions in the courſe of them ſo often as you and I want his aid, to prevent the little accidents of life, or to guard us from them? Can you ſuffer yourſelf to be perſuaded, that the great Creator of this world takes care to ſupport a bridge which was quite rotten, and to make it ſtand firm a few minutes longer till you had rode over it?

it? Or will he uphold a falling tower while we two were paſſing by it, that ſuch worms as you and I are might eſcape the ruin?

BUT you ſay, *you prayed for his protection in the morning, and he certainly hears prayer.* I grant he knows it: but are you ſo fond and weak, ſaid he, as to ſuppoſe that the univerſal Lord of all had ſuch a regard to a word or two of your breath, as to make alterations in his own eternal ſcheme upon that account? Nor is there any other way whereby his providence can preſerve you in anſwer to prayer, but by creating ſuch perpetual interruptions and changes in his own conduct according to your daily behaviour.

I ACKNOWLEDGE, ſays *Fidens*, there is no other way to ſecure the doctrine of divine providence in all theſe common affairs; and therefore I begin to doubt, whether God does or ever will exert himſelf ſo particularly in our little concerns.

HAVE a care, good *Fidens*, that you yield not too far: take heed leſt you have granted too much to *Fatalio*. Pray let me aſk of you, could not the great God, who graſps and ſurveys all future and diſtant things in one ſingle view, could not he from the beginning foreſee your morning prayer for his protection, and appoint all ſecond cauſes to concur for the ſupport of that crazy *bridge*, or to make that old *tower* ſtand firm till you

had eſcaped the danger? Or could not he cauſe all the mediums to work ſo as to make it fall before you come near it? Can he not appoint all his own tranſactions in the univerſe, and every event in the natural world, in a way of perfect correſpondence with his own fore-knowledge of all the events, actions and appearances of the moral world in every part of it? Can he not direct every thing in nature, which is but his ſervant, to act in perfect agreement with his eternal preſcience of our ſins, or of our piety? And hereby all the glory of providence, and our neceſſary dependence upon it by faith and prayer, are as well ſecured, as if he interpoſed to alter his own ſcheme every moment.

LET me aſk again: Did not he in his own counſels or decrees appoint thunders and lightnings, and earthquakes, to burn up and deſtroy *Sodom* and *Gomorrah*, and turn them into a dead ſea, juſt at the time when the iniquities of thoſe cities were raiſed to their ſupreme height? Did he not ordain the fountains of the deep to be broken up, and overwhelming rains to fall down from heaven, juſt when a guilty world deſerved to be drowned; while he took care of the ſecurity of righteous *Noah*, by an ark which ſhould float upon that very deluge of waters? Thus, he can puniſh the criminal when he pleaſes, and reward the devout

devout worſhipper in the proper ſeaſon, by his original and eternal ſchemes of appointment, as well as if he interpoſed every moment anew. Take heed, *Fidens*, that you be not tempted away by ſuch ſophiſms of *Fatalio*, to withhold prayer from God, and to renounce your faith in his providence.

REMEMBER this ſhort and plain caution of the ſubtile errors of men. Let a ſnake but once thruſt in his head at ſome ſmall unguarded fold of your garment, and he will inſenſibly and unavoidably wind his whole body into your boſom, and give you a pernicious wound.

XI. ON the other hand, *when you have found your opponent make any ſuch conceſſion as may turn to your real advantage in maintaining the truth, be wiſe and watchful to obſerve it, and make a happy improvement of it.* *Rhapſodus* has taken a great deal of pains to detract from the honour of chriſtianity, by ſly inſinuations, that the ſacred writers are perpetually promoting virtue and piety by promiſes and threatenings; whereas *neither the fear of future puniſhment, nor the hope of future reward, can poſſibly be called good affections, or ſuch as are the acknowledged ſprings and ſources of all actions truly good.* He adds further, that *this fear, or this hope, cannot conſiſt in reality with virtue or goodneſs, if it either ſtands as eſſential to any moral*

moral performance, or as a conſiderable motive to any good action: and thus he would fain lead *Chriſtians* to be aſhamed of the goſpel of *Chriſt*, becauſe of its future and eternal promiſes and threatenings, as being inconſiſtent with his notion of virtue; for he ſuppoſes virtue ſhould be ſo beloved and practiſed for the ſake of its own beauty and lovelineſs, that all other motives ariſing from rewards or puniſhments, fear or hope, do really take away juſt ſo much from the very nature of virtue as their influence reaches to: and no part of thoſe good practices are really valuable, but what ariſes from the mere love of virtue itſelf, without any regard to puniſhment or reward.

BUT obſerve in two pages afterwards, he grants that *this principle of fear of future puniſhment, and hope of future reward, how mercenary and ſervile ſoever it may be accounted, is yet in many circumſtances a great advantage, ſecurity and ſupport to virtue; eſpecially where there is danger of the violence of rage or luſt, or any counter-working paſſion to control and overcome the good affections of the mind.*

Now the rule and the practice of *Chriſtianity*, or the goſpel, as it is cloſely connected with future rewards and puniſhments, may be well ſupported by this conceſſion. Pray, *Rhapſodus*, tell me, if every man in this preſent life, by the violence of

ſome counter-working paſſion, may not have his good affections to virtue controlled or overcome? May not therefore his eternal fears and hopes be a great advantage, ſecurity and ſupport to virtue in ſo dangerous a ſtate and ſituation, as our journey through this world towards a better? And this is all that the defence of chriſtianity neceſſarily requires.

AND yet further, let me aſk our *rhapſodiſt*, "if you have nothing elſe, Sir, but the beauty and excellency, and lovelineſs of virtue to preach and flouriſh upon before ſuch ſorry and degenerate creatures as the bulk of mankind are, and you have no future rewards or puniſhments with which to addreſs their hopes and fears, how many of theſe vicious wretches will you ever reclaim from all their varieties of profaneneſs, intemperance and madneſs? How many have you ever actually reclaimed by this ſmooth ſoft method, and theſe fine words? What has all that reaſoning and rhetoric done which have been diſplayed by your predeceſſors the *Heathen* moraliſts, upon this excellency and beauty of virtue? What has it been able to do towards the reforming of a ſinful world? Perhaps now and then a man of better natural mould has been a little refined, and perhaps alſo there may have been here and there a man reſtrained or recovered from injuſtice and knavery, from drunkenneſs

neſs and lewdneſs, and vile debaucheries, by this fair reaſoning and philoſophy: but have the paſſions of revenge and envy, of ambition and pride, and the inward ſecret vices of the mind been mortified merely by this philoſophical language? Have any of theſe men been made new creatures, men of real piety and love to God?

Go dreſs up all the virtues of human nature in all the beauties of your oratory, and declaim aloud on the praiſe of ſocial virtue, and the amiable qualities of goodneſs, till your heart or your lungs ache, among the looſer herds of mankind, and you will ever find, as your *Heathen* fathers have done before, that the wild paſſions and appetites of men are too violent to be reſtrained by ſuch mild and ſilken language. You may as well build up a fence of ſtraw and feathers to reſiſt a cannon-ball, or try to quench a flaming grenado with a ſhell of fair water, as hope to ſucceed in theſe attempts. But an *eternal heaven* and an *eternal hell*, carry divine force and power with them: this doctrine from the mouth of *Chriſtian* preachers has begun the reformation of multitudes: this goſpel has recovered thouſands among the nations from iniquity and death. They have been awakened by theſe awful ſcenes to begin religion, and afterwards their virtue has improved itſelf into ſuperior and more refined

principles and habits by divine grace, and riſen to high and eminent degrees, though not to a conſummate ſtate." The bleſſed God knows human nature much better than *Rhapſodus* doth, and has throughout his word appointed a more proper and more effectual method of addreſs to it by the paſſions of hope and fear, by puniſhments and rewards.

IF you read on four pages further in theſe writings, you will find the author makes another conceſſion. He allows that *the maſter of a family uſing proper rewards and gentle puniſhments towards his children, teaches them goodneſs, and by this help inſtructs them in a virtue which afterwards they practiſe upon other grounds, and without thinking of a penalty or a bribe: and this,* ſays he, *is what we call a liberal education and a liberal ſervice.*

THIS new conceſſion of that author may alſo be very happily improved in favour of *Chriſtianity*. What are the beſt of men in this life? They are by no means perfect in virtue: we are all but children here under the great Maſter of the family, and he is pleaſed by hopes and fears, by mercies and corrections to inſtruct us in virtue, and to conduct us onward towards the ſublimer and more perfect practice of it in the future world, where it ſhall be performed, as in his own language, perhaps *without thinking*

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ing of penalties and bribes. And ſince he hath allowed that this conduct may be called *a liberal education*, and *a liberal ſervice*, let chriſtianity then be indulged the title of a *liberal education* alſo, and it is admirably fitted for ſuch frail and ſinful creatures, while they are training up towards the ſublimer virtues of the heavenly ſtate.

XII. *WHEN you are engaged in a diſpute with a perſon of very different principles from yourſelf, and you cannot find any ready way to prevail with him to embrace the truth by principles which you both freely acknowledge, you may fairly make uſe of his own principles to ſhew him his miſtake, and thus convince or ſilence him, from his own conceſſions.*

IF your opponent ſhould be a *Stoic* philoſopher, or a *Jew*, you may purſue your argument in defence of ſome *Chriſtian* doctrine or duty againſt ſuch a diſputant, by axioms or laws borrowed either from *Zeno* or *Moſes*. And though you do not enter into the enquiry how many of the laws of *Moſes* are abrogated, or whether *Zeno* was right or wrong in his philoſophy; yet if from the principles and conceſſion of your opponent, you can ſupport your argument for the goſpel of *Chriſt*, this has been always counted a fair treatment of an adverſary, and it is called *Argumentum ad hominem*, or *Ratio ex conceſſis*. St. *Paul* ſometimes

makes uſe of this ſort of diſputation, when he talks with *Jews* or *Heathen* philoſophers; and at leaſt he ſilences if not convinces them: which is ſometimes neceſſary to be done againſt an obſtinate and clamorous adverſary, that juſt honour might be paid to truths which he knew were divine, and that the only true doctrine of ſalvation might be confirmed and propagated among ſinful and dying men.

XIII. *YET great care muſt be taken leſt your debates break in upon your paſſions, and awaken them to take part in the controverſy.* When the opponent puſhes hard, and gives juſt and mortal wounds to our own opinion, our paſſions are very apt to feel the ſtrokes, and to riſe in reſentment and defence. *Self* is ſo mingled with the *ſentiments* which we have choſen, and has ſuch a tender feeling of all the oppoſition which is made to them, that *perſonal brawls* are very ready to come in as *ſeconds*, to ſucceed and finiſh the *diſpute of opinions*. Then noiſe and clamour and folly appear in all their ſhapes, and chaſe reaſon and truth out of ſight.

How unhappy is the caſe of frail and wretched mankind, In this dark or duſky ſtate of ſtrong paſſion and glimmering reaſon? How ready are we, when our paſſions are engaged in the diſpute, to conſider more what loads of nonſenſe and reproach we can lay

lay upon our opponent, than what reaſon and truth require in the controverſy itſelf. Diſmal are the conſequences mankind are too often involved in by this evil principle; it is this common and dangerous practice, that carries the heart aſide from all that is fair and honeſt in our ſearch after truth, or the propagation of it in the world. One would wiſh from one's very ſoul, that none of the *Chriſtian* fathers had been guilty of ſuch follies as theſe.

BUT St. *Jerome* fairly confeſſes this evil principle, in his apology for himſelf to *Pammachius*, "*that he had not ſo much regarded what was exactly to be ſpoken in the controverſy he had in hand, as what was fit to lay a load on* Jovinian." And indeed, I fear this was the vile cuſtom of many of the writers even in the church-affairs of thoſe times. But it will be a double ſcandal upon us in our more enlightened age, if we will allow ourſelves in a conduct ſo criminal and diſhoneſt. Happy ſouls, who keep ſuch a ſacred dominion over their inferior and animal powers, and all the influences of pride, and ſecular intereſt, that the ſenſitive tumults, or theſe vicious influences never riſe to diſturb the ſuperior and better operations of the reaſoning mind!

XIV. THESE *general directions* are neceſſary, or at leaſt uſeful in all debates whatſoever, whether they ariſe in occaſional con-

verſation, or are appointed at any certain time or place; whether they are managed with or without any formal rules to govern them. But there are three ſorts of *diſputation*, in which there are ſome forms and orders obſerved, and which are diſtinguiſhed by theſe three names, *viz. Socratic*, *Forenſic*, and *Academic*, i. e. the diſputes of the ſchools.

CONCERNING each of theſe it may not be improper to diſcourſe a little, and give a few *particular directions* or *remarks* about them.

CHAP. XI.

The Socratical Way of Diſputation.

I. THIS method of diſpute derives its name from *Socrates*, by whom it was practiſed, and by other philoſophers in his age, long before *Ariſtotle* invented the particular forms of *ſyllogiſm* in *mood* and *figure*, which are now uſed in ſcholaſtic diſputations.

II. THE *Socratical* way is managed by *queſtions* and *anſwers* in ſuch a manner as this, *viz.* If I would lead a perſon into the belief of a heaven or hell, or a future ſtate

ſtate of rewards and puniſhments, I might begin in ſome ſuch manner of enquiry, and ſuppoſe the moſt obvious and eaſy anſwers.

Queſ. *DOES not God govern the world?*

Anſ. SURELY he that made it governs it.

Queſ. *IS not God both a good and a righteous governor?*

Anſ. BOTH theſe characters doubtleſs belong to him.

Queſ. *WHAT is the true notion of a good and righteous governor?*

Anſ. THAT he puniſhes the wicked and rewards the good.

Queſ. *ARE the good always rewarded in this life?*

Anſ. No ſurely, for many virtuous men are miſerable here, and greatly afflicted.

Queſ. *ARE the wicked always puniſhed in this life?*

Anſ. No certainly, for many of them live without ſorrow, and ſome of the vileſt of men are often raiſed to great riches and honour.

Queſ. *WHEREIN then doth God make it appear that he is good and righteous?*

Anſ. I OWN there is but little appearance of it on earth.

Queſ. *WILL there not be a time then, when the tables ſhall be turned, and the ſcene of things changed, ſince God governs mankind righteouſly?*

Anſ.

Anſ. DOUBTLESS there muſt be a proper time, wherein God will make that goodneſs and that righteouſneſs to appear.

Queſ. *IF this be not before their death, how can it be done?*

Anſ. I CAN think of no other way, but by ſuppoſing man to have ſome exiſtence after this life.

Queſ. *ARE you not convinced then, that there muſt be a ſtate of reward and puniſhment after death?*

Anſ. YES ſurely, I now ſee plainly that the goodneſs and righteouſneſs of God, as governor of the world, neceſſarily require it.

III. Now the *advantages of this method are very conſiderable.*

1. IT repreſents the *form of a dialogue or common converſation,* which is a much more eaſy, more pleaſant, and a more ſprightly way of inſtruction, and more fit to excite the attention and ſharpen the penetration of the learner, than ſolitary reading or ſilent attention to a lecture. Man being a ſociable creature, delights more in converſation, and learns better this way, if it could always be wiſely and happily practiſed.

2. THIS method *hath ſome thing very obliging in it,* and carries a very humble and condeſcending air, when he that inſtructs ſeems

ſeems to be the enquirer, and ſeeks information from him who learns.

3. *IT leads the learner into the knowledge of truth as it were by his own invention*, which is a very pleaſing thing to human nature; and by queſtions pertinently and artificially propoſed, it does as effectually draw him on to diſcover his own miſtakes, which he is much more eaſily perſuaded to relinquiſh when he ſeems to have diſcovered them himſelf.

4. IT is managed in a great meaſure *in the form of the moſt eaſy reaſoning*, always ariſing from ſomething aſſerted or known in the foregoing *anſwer*, and ſo proceeding to enquire ſomething unknown in the following *queſtion*, which again makes way for the next *anſwer*. Now ſuch an exerciſe is very alluring and entertaining to the underſtanding, while its own reaſoning powers are all along employed; and that without labour or difficulty, becauſe the queriſt finds out and propoſes all the intermediate ideas or middle terms.

IV. THERE is a method very near a-kin to this which has much obtained of late, *viz. writing controverſies by queſtions only*, or confirming or refuting any poſition, or perſuading to or dehorting from any practice by the mere propoſal of *queries*. *The anſwer* to them is ſuppoſed to be ſo plain and ſo neceſſary, that they are not expreſſed becauſe the

the query itſelf carries a convincing argument in it, and ſeems to determine what the *anſwer* muſt be.

V. IF Chriſtian catechiſms could be framed in the manner of a *Socratical* diſpute by queſtion and anſwer, it would wonderfully enlighten the minds of children, and it would improve their intellectual and reaſoning powers, at the ſame time that it leads them into the knowledge of religion: and it is upon one account, well ſuited to the capacity of children; for the *queſtions* may be pretty numerous, and the queriſt muſt not proceed too ſwiftly towards the determination of his point propoſed, that he may with more eaſe, with brighter evidence, and with ſurer ſucceſs, draw the learner on to aſſent to thoſe *principles* ſtep by ſtep, from whence the *final concluſion* will naturally ariſe. The only inconvenience would be this, that if children were to reaſon out all their way entirely into the knowledge of every part of their religion, it would draw common catechiſms into too large a volume for their leiſure, attention or memory.

YET thoſe who explain their catechiſms to them may, by due application and forethought, inſtruct them in this manner.

CHAP.

CHAP. XII.

Of Forenſic DISPUTES.

I. THE *Forum* was a public place in *Rome*, where lawyers and orators made their ſpeeches before the proper judge in matter of property, or in criminal caſes, to accuſe or excuſe, to complain or defend: thence all ſorts of diſputations in public aſſemblies or courts of juſtice, where ſeveral perſons make their diſtinct ſpeeches for or againſt any perſon or thing whatſoever, but more eſpecially in civil matters, may come under the name of *forenſic diſputes*.

II. THIS is practiſed not only in the *courts of judicature*, where a ſingle perſon ſits to judge of the truth or goodneſs of any cauſe, and to determine according to the weight of reaſons on either ſide; but it is uſed alſo in *political ſenates or parliaments*, *eccleſiaſtical ſynods*, and *aſſemblies* of various kinds.

IN theſe aſſemblies, generally one perſon is choſen *chairman* or *moderator*, not to give a determination to the controverſy, but chiefly to keep the ſeveral ſpeakers to the rules of order and decency in their conduct; but the final determination of the queſtions ariſes from the *majority of opinions* or *votes* in the aſſembly, according as they

they are or ought to be ſwayed by the ſuperior weight of reaſon appearing in the ſeveral ſpeeches that are made.

III. THE method of proceeding is uſually in ſome ſuch form as this. The firſt perſon who ſpeaks when the court is ſet, opens the caſe either more briefly or at large, and propoſes the caſe to the judge or the chairman, or moderator of the aſſembly, and gives his own reaſons for his opinion in the caſe propoſed.

IV. THIS perſon is ſucceeded by one, or perhaps two or ſeveral more, who paraphraſe on the ſame ſubject, and argue on the ſame ſide of the queſtion; they confirm what the firſt has ſpoken, and urge new *reaſons* to enforce the ſame: then thoſe who are of a different opinion, ſtand up and make their ſeveral ſpeeches in a ſucceſſion, oppoſing the cauſe which others have maintained, giving their *reaſons* againſt it, and endeavouring to refute the arguments whereby the firſt ſpeakers have ſupported it.

V. AFTER this, one and another riſes up to make their *replies*, to vindicate or to condemn, to eſtabliſh or to confute what has been offered before on each ſide of the queſtion; till at laſt, according to the rules, orders, cuſtoms of the court or aſſembly, the controverſy is decided, either by a *ſingle judge* or the *ſuffrage of the aſſembly*.

VI.

VI. WHERE the queſtion or matter in debate conſiſts of ſeveral parts, after it is once opened by the firſt or ſecond ſpeaker, ſometimes thoſe who follow take each of them a particular part of the debate, according to their inclination or their prior agreement, and apply themſelves to argue upon that ſingle point only, that ſo the whole *complexion* of the debate may not be thrown into confuſion by the variety of ſubjects, if every ſpeaker ſhould handle all the ſubjects of debate.

VII. BEFORE the final ſentence or determination is given, it is uſual to have the reaſons and arguments which have been offered on both ſides, ſummed up and repreſented in a more compendious manner; and this is done either by the appointed *judge of the court*, or the *chairman*, or ſome *noted perſon* in the aſſembly, that ſo judgment may proceed upon the fulleſt ſurvey of the whole ſubject, that as far as poſſible in human affairs nothing may be done contrary to truth or juſtice.

VIII. As this is a practice in which multitudes of gentlemen, beſides thoſe of the learned profeſſions, may be engaged, at leaſt in their maturer years of life, ſo it would be a very proper and uſeful thing to introduce this cuſtom into our academies, *viz.* to propoſe caſes, and let the ſtudents debate them in a *forenſic* manner in the preſence

ſence of their tutors. There was ſomething of this kind practiſed by the *Roman* youth in their ſchools, in order to train them up for orators, both in the *forum* and in the *ſenate*. Perhaps *Juvenal* gives ſome hints of it when he ſays,

——— ——— ——— *& nos*
Conſilium dedimus Syllæ, privatus ut altum
Dormiret ——— ——— ——— Sat. 1.

Where with men-boys I ſtrove to get renown,
Adviſing *Sylla* to a private gown,
That he might ſleep the ſounder.

SOMETIMES theſe were aſſigned to the boys as ſingle ſubjects of a theme or declamation: ſo the ſame poet ſpeaks ſarcaſtically to *Hannibal*,

——— *I demens, & ſævas curre per Alpes,*
Ut pueris placeas & declamatio fias.
Sat. 10.

Go climb the rugged *Alps*, ambitious fool,
To pleaſe the boys, and be a theme at ſchool.

SEE more of this matter in *Kennet*'s Antiquities of *Rome*, in the ſecond *Eſſay* on the *Roman* education.

CHAP.

CHAP. XIII.

Of Academic or Scholaſtic DISPUTATION.

THE common methods in which *diſputes* are managed in the *Schools of Learning*, are theſe, *viz.*

I. THE *tutor* appoints a *queſtion* in ſome of the ſciences to be debated amongſt his ſtudents: one of them undertakes to *affirm* or to *deny* the queſtion, and to defend his aſſertion or negation, and to anſwer all objections againſt it; he is called the *reſpondent:* and the reſt of the ſtudents in the ſame claſs, or who purſue the ſame ſcience, are the *opponents*, who are appointed to diſpute or *raiſe objections* againſt the propoſition thus affirmed or denied.

II. EACH of the ſtudents ſucceſſively in their turn becomes the *reſpondent* or the defender of that propoſition, while the reſt *oppoſe* it alſo ſucceſſively in their turns.

III. IT is the buſineſs of the *reſpondent* to write a *theſis* in *Latin*, or ſhort diſcourſe on the queſtion propoſed; and he either *affirms* or *denies* the queſtion according to the opinion of the tutor, which is ſuppoſed

to be the truth, and he reads it at the beginning of the diſpute.

IV. IN his diſcourſe (which is written with as great accuracy as the youth is capable of) he explains the terms of the queſtion, frees them from all ambiguity, fixes their ſenſe, declares the true intent and meaning of the queſtion itſelf, ſeparates it from other queſtions with which it may have been complicated, and diſtinguiſhes it from other queſtions which may happen to be a-kin to it, and then pronounces in the *negative* or *affirmative* concerning it.

V. WHEN this is done, then in the ſecond part of his diſcourſe he gives his own ſtrongeſt arguments to confirm the propoſition he has laid down, *i. e.* to vindicate his own ſide of the queſtion: but he does not uſually proceed to repreſent the *objections* againſt it, and to ſolve or anſwer them; for it is the buſineſs of the other ſtudents to raiſe objections in diſputing.

VI. *Note*, IN ſome ſchools, the *reſpondent* is admitted to talk largely upon the queſtion with many flouriſhes and illuſtrations, to introduce great authorities from ancient and modern writings for the ſupport of it, and to ſcatter *Latin* reproaches in abundance on all thoſe who are of a different ſentiment. But this is not always permitted, nor ſhould it indeed be ever indulged, leſt

leſt it teach youth to reproach inſtead of reaſoning.

VII. WHEN the *reſpondent* has read over his *theſis* in the ſchool, the *junior ſtudent* makes an objection, and draws it up in the regular form of a ſyllogiſm: the *reſpondent* repeats the objection, and either denies the major or minor propoſition directly, or he diſtinguiſhes upon ſome word or phraſe in the major or minor, and ſhews in what ſenſe the propoſition may be true, but that *that* ſenſe does not affect the queſtion; and then declares that in the ſenſe which affects the preſent queſtion the propoſition is not true, and conſequently he denies it.

VIII. THEN the *opponent* proceeds by another ſyllogiſm to vindicate the propoſition that is denied: again the *reſpondent* anſwers by denying or diſtinguiſhing.

THUS the diſputation goes on in a *ſeries or ſucceſſion of ſyllogiſms and anſwers*, till the *objector* is ſilenced, and has no more to ſay.

IX. WHEN he can go no further, the *next ſtudent* begins to propoſe his objection, and then the *third* and the *fourth*, even to the *ſenior*, who is the laſt opponent.

X. DURING this time, the *tutor* ſits in the chair as *Preſident* or *Moderator*, to ſee that the rules of diſputation and decency be obſerved on both ſides; and to admoniſh each diſputant of any irregularity in their

conduct. His work is alſo to illuſtrate and explain the anſwer or diſtinction of the *reſpondent* where it is obſcure, to ſtrengthen it where it is weak, and to correct it where it is falſe: and when the *reſpondent* is pinched with a ſtrong objection, and is at a loſs for an anſwer, the *moderator* aſſiſts him, and ſuggeſts ſome anſwer to the objection of the *opponent*, in defence of the queſtion, according to his own opinion or ſentiment.

XI. IN public diſputes, where the *opponents* and *reſpondents* chuſe their own ſide of the queſtion, the *moderator's* work is not to favour either diſputant; but he only ſits as *preſident* to ſee that the laws of diſputation be obſerved, and a *decorum* maintained.

XII. Now the *laws of diſputation* relate either to the *opponent*, or to the *reſpondent*, or to *both*.

THE *laws obliging the opponent* are theſe,

1. THAT he muſt directly contradict the propoſition of the *reſpondent*, and not merely attack any of the arguments whereby the *reſpondent* has ſupported that propoſition: for it is one thing to *confute a ſingle argument* of the reſpondent, and another to *confute the theſis* itſelf.

2. (WHICH is a-kin to the former) he muſt contradict or oppoſe the very ſenſe and

and intention of the propoſition as the reſpondent has ſtated it, and not merely oppoſe the words of the theſis in any other ſenſe; for this would be the way to plunge the diſpute into ambiguity and darkneſs, to talk beſide the queſtion, to wrangle about words, and to attack a propoſition different from what the *reſpondent* has eſpouſed, which is called *Ignoratio elenchi.*

3. HE muſt propoſe his argument in a plain, ſhort, and ſyllogiſtic form, according to the rules of logic, without flying to *fallacies* or *ſophiſms*; and as far as may be, he ſhould uſe *categorical* ſyllogiſms.

4. THOUGH the *reſpondent* may be attacked either upon a point of his own conceſſion, which is called *Argumentum ex conceſſis*, or by reducing him to an abſurdity, which is called *Reductio ad abſurdum*, yet it is the neateſt, the moſt uſeful, and the beſt ſort of diſputation where the *opponent* draws his objections from the nature of the queſtion itſelf.

5. WHERE the *reſpondent* denies any propoſition, the *opponent*, if he proceed, muſt directly vindicate and confirm that propoſition, *i. e.* he muſt make that propoſition the concluſion of his next ſyllogiſm.

6. WHERE the *reſpondent* limits or diſtinguiſhes any propoſition, the *opponent* muſt directly prove his own propoſition in that ſenſe, and according to that member

of the diſtinction in which the *reſpondent* denied it.

XIII. THE *laws that oblige the reſpondent* are theſe.

1. To repeat the argument of the *opponent* in the very ſame words in which it was propoſed, before he attempts to anſwer it.

2. IF the ſyllogiſm be falſe in the *logical form* of it, he muſt diſcover the fault according to the *rules of logic*.

3. IF the argument does not directly and effectually oppoſe his *theſis*, he muſt ſhew this miſtake, and make it appear that his *theſis* is ſafe, even though the argument of the *opponent* be admitted: or at leaſt, that the argument does only aim at it collaterally, or at a diſtance, and not directly overthrow it, or conclude againſt it.

4. WHERE the *matter* of the *opponent*'s objection is faulty in any part of it, the *reſpondent* muſt grant what is true in it, he muſt deny what is falſe, he muſt diſtinguiſh or limit the propoſition which is ambiguous or doubtful; and then granting the ſenſe in which it is true, he muſt deny the ſenſe in which it is falſe.

5. IF an *hypothetic* propoſition be falſe, the *reſpondent* muſt deny the *conſequence*: if a *disjunctive*, he muſt deny the *disjunction*: if a *categoric* or *relative*, he muſt ſimply deny it,

6. IT

6. IT is ſometimes allowed for the *reſpondent* to uſe an *indirect anſwer* after he has anſwered *directly:* and he may alſo ſhew how the *opponent's* argument may be retorted againſt himſelf.

XIV. THE *laws that oblige both diſputants* are theſe.

1. SOMETIMES it is neceſſary there ſhould be a mention of certain *general principles* in which they both agree, relating to the queſtion, that ſo they may not diſpute on thoſe things which either are or ought to have been firſt granted on both ſides.

2. WHEN the ſtate of the controverſy is well known, and plainly determined and agreed, it muſt not be altered by *either diſputant* in the courſe of the diſputation; and the *reſpondent* eſpecially ſhould keep a watchful eye on the *opponent* in this matter.

3. LET neither *party* invade the province of the other; eſpecially let the *reſpondent* take heed that he does not turn *opponent*; except in retorting the argument upon his adverſary, after a direct reſponſe; and even this is allowed only as an illuſtration or confirmation of his own reſponſe.

4. LET each wait with patience till the other has done ſpeaking. It is a piece of rudeneſs to interrupt another in his ſpeech.

YET, though the *diſputants* have not this liberty, the *moderator* may do it, when either of the *diſputants* break the rules, and

he may interpoſe ſo far as to keep them in order.

XV. IT muſt be confeſt there are ſome *advantages* to be attained by *academical diſputation*. It gives vigour and briſkneſs to the mind thus exerciſed, and relieves the languor of private ſtudy and meditation. It ſharpens the wit and all the inventive powers. It makes the thoughts active, and ſends them on all ſides to find arguments and anſwers both for oppoſition and defence. It gives opportunity of viewing the ſubject of diſcourſe on all ſides, and of learning what inconveniencies, difficulties and objections attend particular opinions. It furniſhes the ſoul with various occaſions of ſtarting ſuch thoughts as otherwiſe would never have come into the mind. It makes a ſtudent more expert in attacking and refuting an error, as well as in vindicating a truth. It inſtructs the ſcholar in the various methods of warding off the force of objections, and of diſcovering and refelling the ſubtle tricks of ſophiſters. It procures alſo a freedom and readineſs of ſpeech, and raiſes the modeſt and diffident genius to a due degree of courage.

XVI. BUT there are ſome very *grievous inconveniencies* that may ſometimes overbalance all theſe *advantages*. For many young ſtudents by a conſtant habit of diſputing, grow impudent and audacious, proud

proud and diſdainful, talkative and impertinent, and render themſelves intolerable by an obſtinate humour of maintaining whatever they have aſſerted, as well as by a ſpirit of contradiction, oppoſing almoſt every thing that they hear. The diſputation itſelf often awakens the paſſions of ambition, emulation, and anger; it carries away the mind from that calm and ſedate temper which is ſo neceſſary to contemplate truth.

XVII. IT is evident alſo, that by frequent exerciſes of this ſort, wherein *opinions true and falſe* are argued, ſupported and refuted on both ſides; the mind of man is led by inſenſible degrees to an uncertain and fluctuating temper, and falls into danger of a *ſceptical humour*, which never comes to an eſtabliſhment in any doctrines. Many perſons by this means become much more ready to oppoſe whatſoever is offered in ſearching out truth; they hardly wait till they have read or heard the ſentiment of any perſon, before their heads are buſily employed to ſeek out arguments againſt it. They grow naturally ſharp in finding out difficulties: and by indulging this humour, they converſe with the dark and doubtful parts of a ſubject ſo long, till they almoſt render themſelves uncapable of receiving the full evidence of a propoſition, and acknowledging the light of truth. It has

ſome

ſome tendency to make a youth a *carping critic*, rather than a *judicious* man.

XVIII. I WOULD add yet further, that in theſe diſputations the *reſpondent* is generally appointed to maintain the ſuppoſed truth, that is, the *tutor's opinion*. But all the *opponents* are buſy and warmly engaged in finding arguments againſt the truth. Now if a ſprightly young genius happens to manage his argument ſo well as to puzzle and gravel the *reſpondent*, and perhaps to perplex the *moderator* a little too, he is ſoon tempted to ſuppoſe his argument unanſwerable, and the truth entirely to lie on his ſide. The pleaſure which he takes in having found a *ſophiſm* which has great appearance of reaſon, and which he himſelf has managed with ſuch ſucceſs, becomes perhaps a ſtrong prejudice to engage his inward ſentiments in favour of his argument, and in oppoſition to the ſuppoſed truth.

XIX. YET perhaps it may be poſſible to reduce *ſcholaſtic diſputations* under ſuch a guard, as may in ſome meaſure prevent moſt of theſe abuſes of them, and the unhappy events that too often attend them: for it is pity that an exerciſe which has ſome valuable benefits attending it, ſhould be utterly thrown away, if it be poſſible to ſecure young minds againſt the abuſe of it; for which purpoſe ſome of theſe *directions* may ſeem proper.

XX.

XX. *GENERAL directions for ſcholaſtic diſputes.*

1. NEVER diſpute upon mere trifles, things that are utterly uſeleſs to be known, under a vain pretence of ſharpening the wit: for the ſame advantage may be derived from ſolid and uſeful ſubjects, and thus two happy ends may be attained at once. Or if ſuch diſputations are always thought dangerous in important matters, let them be utterly abandoned.

2. Do not make infinite and unſearchable things the matter of diſpute, nor ſuch propoſitions as are made up of mere words without ideas, leſt it lead young perſons into a moſt unhappy habit of *talking without a meaning*, and to boldly determine upon things that are hardly within the reach of human capacity.

3. LET not obvious and known truths, or ſome of the moſt plain and certain propoſitions be bandied about in a diſputation, for a mere trial of ſkill: for he that oppoſes them in this manner, will be in danger of contracting a habit of oppoſing all evidence, will acquire a *ſpirit of contradiction*, and pride himſelf in a power of reſiſting the brighteſt light, and fighting againſt the ſtrongeſt proofs: this will inſenſibly injure the mind, and tends greatly to an univerſal ſcepticiſm.

UPON

UPON the whole, therefore, the moſt proper ſubjects of diſpute ſeem to be thoſe queſtions, which are not of the very higheſt importance and certainty, nor of the meaneſt and trifling kind: but rather the intermediate queſtions between theſe two; and there is a large ſufficiency of them in the ſciences. But this I put as a mere propoſal, to be determined by the more learned and prudent.

4. IT would be well if every diſpute could be ſo ordered, as to be a means of ſearching out truth, and not to gain a triumph. Then each *diſputant* might come to the work without bias and prejudice, with a deſire of truth, and not with ambition of glory and victory.

NOR ſhould the aim and deſign of the *reſpondent* be to avoid artfully and eſcape the difficulties which the *opponent* offers, but to diſcuſs them thoroughly, and ſolve them fairly, if they are capable of being ſolved.

AGAIN, let the *opponent* be ſolicitous not to darken and confound the reſponſes that are given him by freſh ſubtilties; but let him bethink himſelf whether they are not a juſt anſwer to the objection, and be honeſtly ready to perceive and accept them, and yield to them.

5. FOR this end, let both the *reſpondent* and *opponent* uſe the cleareſt and moſt diſtinct and expreſſive language in which they

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can clothe their thoughts. Let them ſeek and practiſe brevity and perſpicuity on both ſides, without long declamations, tedious circumlocutions, and rhetorical flouriſhes.

IF there happen to be any doubt or obſcurity on either ſide, let neither the one nor the other ever refuſe to give a fair explication of the words they uſe.

6. THEY ſhould not indulge ridicule, either of perſons and things in their diſputations. They ſhould abſtain from all banter and jeſt, laughter and merriment. Theſe are things that break in upon that philoſophical gravity, ſedateneſs and ſerenity of temper which ought to be obſerved in every ſearch after truth. However, an argument on ſome ſubjects may be ſometimes clothed with a little pleaſantry, yet a jeſt or witticiſm ſhould never be uſed inſtead of an argument, nor ſhould it ever be ſuffered to paſs for a real and ſolid proof.

BUT eſpecially if the ſubject be ſacred or divine, and having nothing in it comical or ridiculous, all ludicrous turns and jocoſe or comical airs ſhould be entirely excluded, leſt young minds become tinctured with a ſilly and prophane ſort of ridicule, and learn to jeſt and trifle with the awful ſolemnities of religion.

7. NOR ſhould ſarcaſm and reproach, or inſolent language ever be uſed among fair diſputants. Turn not off from things

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to ſpeak of perſons. Leave all noiſy conteſts, all immodeſt clamours, brawling language, and eſpecially all perſonal ſcandal and ſcurrility to the meaneſt part of the vulgar world. Let your manner be all candor and gentleneſs, patient and ready to hear, humbly zealous to inform and be informed: you ſhould be free and pleaſant in every anſwer and behaviour, rather like *well-bred gentlemen* in polite converſation, than like *noiſy* and *contentious wranglers*.

8. IF the *opponent* ſees victory to incline to his ſide, let him be content to ſhew the force of his argument to the intelligent part of the company, without too importunate and petulant demands of an anſwer, and without inſulting over his antagoniſt, or putting the modeſty of the *reſpondent* to the bluſh. Nor let the *reſpondent* triumph over the *opponent*, when he is ſilent and replies no more. On which ſide ſoever victory declares herſelf, let neither of them manage with ſuch unpleaſing and inſolent airs, as to awaken thoſe evil paſſions of pride, anger, ſhame or reſentment on either ſide, which alienate the mind from truth, render it obſtinate in the defence of an error, and never ſuffer it to part with any of its old opinions.

IN ſhort, when truth evidently appears on either ſide, let them learn to yield to conviction. When either party is at a *non-plus*,

plus, let them confeſs the difficulty, and deſire preſent aſſiſtance or further time and retirement to conſider of the matter, and not rack their preſent invention to find out little ſhifts to avoid the force and evidence of truth.

9. MIGHT it not be a ſafer practice, in order to attain the beſt ends of diſputation, and to avoid ſome of the ill effects of it, if the *opponents* were ſometimes engaged on the ſide of truth, and produced their arguments in oppoſition to error? And what if the *reſpondent* was appointed to ſupport the error, and defend it as well as he could, till he was forced to yield at leaſt to thoſe arguments of the opponents, which appear to be really juſt and ſtrong and unanſwerable?

IN this practice, the *theſis* of the *reſpondent* ſhould only be a fair ſtating of the queſtion, with ſome of the chief objections againſt the truth propoſed and ſolved.

PERHAPS this practice might not ſo eaſily be perverted and abuſed to raiſe a *cavilling*, *diſputative* and *ſceptical* temper in the minds of youth.

I CONFESS in this method which I now propoſe, there would be one among the ſtudents, *viz.* the *reſpondent*, always engaged in the ſupport of ſuppoſed error; but all the reſt would be exerciſing their talents in arguing for the ſuppoſed truth: whereas in

the common methods of diſputation in the ſchools, eſpecially where the ſtudents are numerous, each ſingle ſtudent is perpetually employed to oppoſe the truth and vindicate error, except once in a long time when it comes to his turn to be *reſpondent*.

10. UPON the whole, it ſeems neceſſary that theſe methods of diſputation ſhould be learnt in the ſchools, in order to teach ſtudents better to defend truth, and to refute error, both in writing and converſation, where the ſcholaſtic forms are utterly neglected.

BUT after all, the advantage which youth may gain by diſputations depends much on the *tutor* or *moderator:* he ſhould manage with ſuch prudence both in the diſputation and at the end of it, as to make all the *diſputants* know the very point of controverſy, wherein it conſiſts; he ſhould manifeſt the fallacy of ſophiſtical objections, and confirm the ſolid arguments and anſwers. This might teach ſtudents how to make the *art of diſputation* uſeful for the ſearching out the truth and the defence of it, that it may not be learnt and practiſed only as an *art of wrangling*, which reigned in the ſchools ſeveral hundred years, and diveſted the growing reaſon of youth of its beſt hopes and improvements.

CHAP.

CHAP. XIV.

Of STUDY, *or* MEDITATION.

I. IT has been proved and eſtabliſhed in ſome of the foregoing chapters, that neither our own *obſervations*, nor our *reading the labours of the learned*, nor the *attendance on the beſt lectures of inſtruction*, nor enjoying the *brighteſt converſation*, can ever make a man truly *knowing* and *wiſe*, without the *labours of his own reaſon* in ſurveying, examining and judging concerning all ſubjects upon the beſt evidence he can acquire. A *good genius*, or *ſagacity of thought*, a *happy judgment*, a *capacious memory*, and *large opportunities of obſervation and converſe*, will do much of themſelves towards the cultivation of the mind, where they are well improved: but where to the advantage of *learned lectures*, *living inſtructions*, and *well choſen* books, *diligence* and *ſtudy* are ſuperadded, this man has all human aids concurring to raiſe him to a ſuperior degree of wiſdom and knowledge.

UNDER the preceding heads of diſcourſe, it has been already declared how our own *meditation* and *reflection* ſhould examine, cultivate and improve all other methods and advantages of enriching the under-

ſtanding. What remains in this *chapter* is to give ſome *further occaſional hints* how to employ our own thoughts, what ſort of ſubjects we ſhould meditate on, and in what manner we ſhould regulate our ſtudies, and how we may improve our judgment, ſo as in the moſt effectual and compendious way to attain ſuch knowledge as may be moſt uſeful for every man in his circumſtances of life, and particularly for thoſe of the learned profeſſions.

II. THE firſt direction for youth is this, *learn betimes to diſtinguiſh between words and things.* Get clear and plain ideas of the things you are ſet to ſtudy. Do not content yourſelves with mere words and names, leſt your laboured improvements only amaſs a heap of unintelligible phraſes, and you feed upon huſks inſtead of kernels. This rule is of unknown uſe in every ſcience.

BUT the greateſt and moſt common danger is in the ſacred ſcience of theology, where ſettled terms and phraſes have been pronounced divine and orthodox, which yet have had no meaning in them. The *ſcholaſtic divinity* would furniſh us with numerous inſtances of this folly: and yet for many ages all *truth* and all *hereſy* have been determined by ſuch ſenſeleſs teſts, and by words without ideas: ſuch *Shibboleths* as theſe have decided the ſecular fates of men; and biſhopricks or burning, mi-

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tres or faggots have been the rewards of different perſons, according as they pronounced theſe conſecrated ſyllables, or not pronounced them. To defend them, was all piety and pomp and triumph; to deſpiſe them, or to doubt or deny them, was torture and death. A thouſand thank-offerings are due to that providence which has delivered our age and our nation from theſe abſurd iniquities! O that every ſpecimen and ſhadow of this madneſs were baniſhed from our ſchools and churches in every ſhape!

III. LET not young ſtudents *apply themſelves to ſearch out deep, dark and abſtruſe matters, far above their reach,* or ſpend their labour in *any peculiar ſubjects, for which they have not the advantages of neceſſary antecedent learning, or books, or obſervations.* Let them not be too haſty to know things above their preſent powers, nor plunge their enquiries at once into the depths of knowledge, nor begin to ſtudy any ſcience in the middle of it; this will confound rather than enlighten the underſtanding: ſuch practices may happen to diſcourage and jade the mind by an attempt above its power, it may balk the underſtanding, and create an averſion to future diligence, and perhaps by deſpair may forbid the purſuit of that ſubject for ever afterwards; as a limb overſtrained by lifting

a weight above its power, may never recover its former agility and vigour; or if it does, the man may be frighted from ever exerting his ſtrength again.

IV. NOR yet let any ſtudent on the other hand *fright himſelf at every turn with unſurmountable difficulties*, nor imagine that the truth is wrapt up in impenetrable darkneſs. Theſe are formidable *ſpectres* which the underſtanding raiſes ſometimes to flatter its own lazineſs. Thoſe things which in a remote and confuſed view ſeem very obſcure and perplexed, may be approached by gentle and regular ſteps, and may then unfold and explain themſelves at large to the eye. The hardeſt problems in *geometry*, and the moſt intricate ſchemes or diagrams may be explicated and underſtood ſtep by ſtep: every great mathematician bears a conſtant witneſs to this obſervation.

V. IN learning any new thing, there ſhould *be as little as poſſible firſt propoſed* to the mind at once, and that being underſtood and fully maſtered, proceed then to the next adjoining part yet unknown. This is a ſlow, but ſafe and ſure way to arrive at knowledge. If the mind apply itſelf at firſt to eaſier ſubjects and things near a-kin to what is already known, and then advance to the more remote and knotty parts of knowledge by ſlow degrees, it will be able in this manner to cope with great difficulties,

ties, and prevail over them with amazing and happy ſucceſs.

MATHON happened to dip into the two laſt chapters of a new book of *geometry* and *menſurations*; as ſoon as he ſaw it, and was frighted with the complicated diagrams which he found there, about the *Fruſtums of Cones* and *Pyramids*, &c. and ſome deep demonſtrations among *conic ſections*; he ſhut the book again in deſpair, and imagined none but a Sir *Iſaac Newton* was ever fit to read it. But his tutor happily perſuaded him to begin the firſt pages about lines and angles; and he found ſuch ſurpriſing pleaſure in three weeks time in the victories he daily obtained, that at laſt he became one of the chief geometers of his age.

VI. *ENGAGE not the mind in the intenſe purſuit of too many things at once*; eſpecially ſuch as have no relation to one another. This will be ready to diſtract the underſtanding, and hinder it from attaining perfection in any one ſubject of ſtudy. Such a practice, gives a ſlight ſmattering of ſeveral ſciences without any ſolid and ſubſtantial knowledge of them, and without any real and valuable improvement; and though two or three ſorts of ſtudy may be uſefully carried on at once, to entertain the mind with variety, that it may not be overtired with one ſort of thoughts, yet a mul-

titude of ſubjects will too much diſtract the attention, and weaken the application of the mind to any one of them.

WHERE two or three ſciences are purſued at the ſame time, if one of them be dry, abſtracted, and unpleaſant, as *logic*, *metaphyſics*, *law*, *languages*, let another be more entertaining and agreeable, to ſecure the mind from wearineſs and averſion to ſtudy. Delight ſhould be intermingled with labour as far as poſſible, to allure us to bear the fatigue of dry ſtudies the better. *Poetry*, *practical mathematics*, *hiſtory*, &c. are generally eſteemed entertaining ſtudies, and may be happily uſed for this purpoſe. Thus while we relieve a dull and heavy hour by ſome alluring employments of the mind, our very diverſions enrich our underſtandings, and our pleaſure is turned into profit.

VII. IN the purſuit of every valuable ſubject of knowledge *keep the end always in your eye*, and *be not diverted from it by every petty trifle you meet with in the way*. Some perſons have ſuch a wandering genius, that they are ready to purſue every incidental theme or occaſional idea, till they have loſt ſight of their original ſubject. Theſe are the men who when they are engaged in converſation, prolong their ſtory by dwelling on every incident, and ſwell their narrative with long parentheſes, till they

they have loſt their firſt deſign; like a man who is ſent in queſt of ſome great treaſure, but he ſteps aſide to gather every flower he finds, or ſtands ſtill to dig up every ſhining pebble he meets with in his way, till the treaſure is forgotten and never found.

VIII. *EXERT your care, ſkill and diligence about every ſubject, and every queſtion, in a juſt proportion to the importance of it,* together with the *danger and bad conſequences of ignorance or error therein.* Many excellent advantages flow from this one *direction.*

1. THIS rule will teach you to be very careful in *gaining ſome general and fundamental truths both in philoſophy, in religion, and in human life*; becauſe they are of the higheſt moment, and conduct our thoughts with eaſe into a thouſand inferior and particular propoſitions. Such is that great principle in natural philoſophy, the *doctrine of gravitation,* or *mutual tendency of all bodies toward each other,* which Sir *Iſaac Newton* has ſo well eſtabliſhed, and from which he has drawn the ſolution of a multitude of appearances in the heavenly bodies as well as on earth.

SUCH is that golden principle of *morality* which our bleſſed Lord has given us, *Do that to others, which you think juſt and reaſonable that others ſhould do to you,* which is almoſt ſufficient in itſelf to ſolve all caſes

of conſcience which relate to our neighbour.

SUCH are thoſe principles in religion, that a *rational creature is accountable to his Maker for all his actions*; that *the ſoul of man is immortal*; that *there is a future ſtate of happineſs and of miſery depending on our behaviour in the preſent life, on which all our religious practices are built or ſupported.*

WE ſhould be very curious in *examining all propoſitions that pretend to this honour* of being *general principles:* and we ſhould not without juſt evidence admit into this rank mere matters of common fame, or commonly received opinions; no, nor the general determinations of the learned, or the eſtabliſhed articles of any church or nation, *&c.* for there are many learned preſumptions, many ſynodical and national miſtakes, many eſtabliſhed falſehoods, as well as many vulgar errors, wherein multitudes of men have followed one another for whole ages almoſt blindfold. It is of great importance for every man to be careful that theſe general principles are juſt and true; for one error may lead us into thouſands, which will naturally follow, if once a *leading falſehood* be admitted.

2. THIS rule will direct us to be *more careful about practical points than mere ſpeculations*, ſince they are commonly of much greater uſe and conſequence: therefore the

the ſpeculations of *Algebra*, the doctrine of *infinites*, and the *quadrature of curves in mathematical learning*, together with all the train of theorems in *natural philoſophy*, ſhould by no means intrench upon our ſtudies of *morality* and *virtue*. Even in the ſcience of *divinity* itſelf, the ſublimeſt ſpeculations of it are not of that worth and value, as the rules of duty towards God and towards men.

3. *IN matters of practice we ſhould be moſt careful to fix our end right*, and wiſely determine the *ſcope at which we aim*; becauſe that is to direct us in the choice and uſe of all the *means to attain it*. If our end be wrong, all our labour in the means will be vain, or perhaps ſo much the more pernicious as they are better ſuited to attain that miſtaken end. If mere ſenſible pleaſure or human grandeur or wealth be our chief end, we ſhall chuſe means contrary to piety and virtue, and proceed apace toward real miſery.

4. THIS rule will *engage our beſt powers and deepeſt attention* in *the affairs of religion*, and things that *relate to a future world*; for thoſe propoſitions which extend only to the intereſt of the preſent life, are but of ſmall importance, when compared with thoſe that have influence upon our everlaſting concernments.

5. AND

5. AND even in the affairs of religion, if we walk by the conduct of this rule, we ſhall be much more laborious in our enquiries into the *neceſſary and fundamental articles of faith and practice* than the *leſſer appendices of chriſtianity.* The great doctrines of *repentance toward God, faith in our Lord Jeſus Chriſt,* with *love to men,* and *univerſal holineſs,* will employ our beſt and brighteſt hours and meditations; while the *mint, anniſe,* and *cummin,* the *geſtures* and *veſtures* and *fringes of religion,* will be regarded no further then they have a plain and evident connection with *faith* and *love,* with *holineſs* and *peace.*

6. THIS rule will make us ſolicitous not only to *avoid ſuch errors, whoſe influence will ſpread wide into the whole ſcheme of our own knowledge and practice,* but ſuch miſtakes alſo whoſe *influence would be yet more extenſive and injurious to others, as well as to ourſelves*; perhaps to many perſons or many families, to a whole church, a town, a country, or a kingdom. Upon this account, perſons who are called to inſtruct others, who are raiſed to any eminence either in church or ſtate, ought to be careful in ſettling their principles in matters relating to the *civil,* the *moral* or the *religious* life; leſt a miſtake of theirs ſhould diffuſe wide miſchief, ſhould draw along with

with it moſt pernicious conſequences, and perhaps extend to following generations.

THESE are ſome of the advantages which ariſe from the eighth rule, *viz.* purſue every enquiry and ſtudy in proportion to its real value and importance.

IX. HAVE a care leſt *ſome beloved notion, or ſome darling ſcience ſo far prevail over your mind, as to give a ſovereign tincture to all your other ſtudies,* and diſcolour all your ideas; like a perſon in the jaundice, who ſpreads a yellow ſcene with his eyes over all the objects which he meets. I have known a man of peculiar ſkill in *muſic,* and much devoted to that ſcience, who found out a great reſemblance of the *Athanaſian doctrine of the trinity* in every ſingle note, and he thought it carried ſomething of argument in it to prove that doctrine. I have read of another who accommodated the ſeven days of the firſt week of creation to ſeven notes of muſic, and thus the whole creation became harmonious.

UNDER this influence, derived from *mathematical* ſtudies, ſome have been tempted to caſt all their *logical,* their *metaphyſical,* and their *theological* and *moral* learning into the method of *mathematicians,* and bring every thing relating to thoſe *abſtracted,* or thoſe *practical* ſciences under *theorems, problems, poſtulates, ſcholiums, corollaries,* &c. whereas the matter ought always to direct

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the method; for all ſubjects or matters of thought, cannot be moulded or ſubdued to one form. Neither the rules for the conduct of the underſtanding, nor the doctrines nor duties of religion and virtue can be exhibited naturally in figures and diagrams. Things are to be conſidered as they are in themſelves; their nature is inflexible, and their natural relations unalterable; and therefore in order to conceive them aright, we muſt bring our underſtandings to things, and not pretend to bend and ſtrain things to comport with our fancies and forms.

X. *SUFFER not any beloved ſtudy to prejudice your mind ſo far in favour of it as to deſpiſe all other learning.* This is a fault of ſome little ſouls who have got a ſmattering of *aſtronomy*, *chemiſtry*, *metaphyſics*, *hiſtory*, &c. and for want of a due acquaintance with other ſciences, make a ſcoff at them all in compariſon of their favourite ſcience. Their underſtandings are hereby cooped up in narrow bounds, ſo that they never look abroad into other provinces of the intellectual world, which are more beautiful perhaps, and more fruitful than their own: if they would ſearch a little into other ſciences, they might not only find treaſures of new knowledge, but might be furniſhed alſo with rich hints of thought, and glorious aſſiſtances to cultivate that very province

vince to which they have confined themſelves.

HERE I would always give ſome grains of allowance to the ſacred ſcience of *theology*, which is incomparably ſuperior to all the reſt, as it teaches us the knowledge of God, and the way to his eternal favour. This is that noble ſtudy which is every man's duty, and every one who can be called a rational creature is capable of it. This is that ſcience which would truly enlarge the minds of men, were it ſtudied with that freedom, that unbiaſſed love of truth, and that ſacred charity which it teaches? and if it were not made, contrary to its own nature, the occaſion of ſtrife, faction, malignity, a narrow ſpirit, and unreaſonable impoſitions on the mind and practice. Let this therefore ſtand always chief.

XI. *LET every particular ſtudy have due and proper time aſſigned it, and let not a favourite ſcience prevail with you to lay out ſuch hours upon it, as ought to be employed upon the more neceſſary and more important affairs or ſtudies of your profeſſion.* When you have, according to the beſt of your diſcretion, and according to the circumſtances of your life, fixed proper hours for particular ſtudies, endeavour to keep to thoſe rules; not indeed with a ſuperſtitious preciſeneſs, but with ſome good degrees of a regular conſtancy. Order and method in a courſe

courſe of ſtudy ſaves much time, and makes large improvements: ſuch a fixation of certain hours, will have a happy influence to ſecure you from trifling and waſting away your minutes in impertinence.

XII. *DO not apply yourſelf to any one ſtudy at one time, longer than the mind is capable of giving a cloſe attention to it without wearineſs or wandering.* Do not over-fatigue the ſpirits at any time, leſt the mind be ſeized with a laſſitude, and thereby be tempted to nauſeate and grow tired of a particular ſubject before you have finiſhed it.

XIII. IN the beginning of your application to any new ſubject, *be not too uneaſy under preſent difficulties that occur, nor too importunate and impatient for anſwers and ſolutions to any queſtions that ariſe.* Perhaps a little more ſtudy, a little further acquaintance with the ſubject, a little time and experience will ſolve thoſe difficulties, untie the knot, and make your doubts vaniſh: eſpecially if you are under the inſtruction of a tutor, he can inform you that your enquiries are perhaps too early, and that you have not yet learnt thoſe principles upon which the ſolution of ſuch a difficulty depends.

XIV. *DO not expect to arrive at certainty in every ſubject which you purſue.* There are a hundred things wherein we mortals

in this dark and imperfect ſtate muſt be content with probability, where our beſt light and reaſonings will reach no further. We muſt balance arguments as juſtly as we can, and where we cannot find weight enough on either ſide to determine the ſcale with ſovereign force and aſſurance, we muſt content ourſelves perhaps with a ſmall preponderation. This will give us a probable opinion, and thoſe probabilities are ſufficient for the daily determination of a thouſand actions in human life, and many times even in matters of religion.

IT is admirably well expreſſed by a late writer, 'when there is great ſtrength of argument ſet before us, if we will refuſe to do what appears moſt fit for us, until every little objection is removed, we ſhall never take one wiſe reſolution as long as we live.'

SUPPOSE I had been honeſtly and long ſearching what religion I ſhould chuſe, and yet I could not find that the arguments in defence of *Chriſtianity* aroſe to complete certainty, but went only ſo far as to give me a probable evidence of the truth of it; though many difficulties ſtill remained, yet I ſhould think myſelf obliged to receive and practiſe that religion; for the God of nature and reaſon has bound us to aſſent and act according to the beſt evidence we have, even though it be not abſolute and complete; and as he is our ſupreme judge, his abounding

abounding goodneſs and equity will approve and acquit the man whoſe conſcience honeſtly and willingly ſeeks the beſt light, and obeys it as far as he can diſcover it.

BUT in matters of great importance in religion, let him join all due diligence with earneſt and humble prayer for divine aid in his enquiries; ſuch prayer and ſuch diligence as eternal concerns require, and ſuch as he may plead with courage before the Judge of all.

XV. *ENDEAVOUR to apply every ſpeculative ſtudy,* as far as poſſible, *to ſome practical uſe,* that both yourſelf and others may be the better for it. Enquiries even in natural philoſophy ſhould not be mere amuſements, and much leſs in the affairs of religion. Reſearches into the ſprings of natural bodies and their motions ſhould lead men to invent happy methods for the eaſe and convenience of human life; or at leaſt they ſhould be improved to awaken us to admire the wonderous wiſdom and contrivance of God our Creator in all the works of nature.

IF we purſue mathematical ſpeculations, they will inure us to attend cloſely to any ſubject, to ſeek and gain clear ideas, to diſtinguiſh truth from falſehood, to judge juſtly, and to argue ſtrongly; and theſe ſtudies do more directly furniſh us with all

all the various rules of thoſe uſeful arts of life, viz. *meaſuring*, *building*, *ſailing*, &c.

EVEN our very enquiries and diſputations about *vacuum* or *ſpace* and *atoms*, about *incommenſurable quantities*, and the *infinite diviſibility of matter* and *eternal duration*, which ſeems to be purely ſpeculative, will ſhew us ſome good practical leſſons, will lead us to ſee the weakneſs of our nature, and ſhould teach us humility in arguing upon divine ſubjects and matters of ſacred revelation. This ſhould guard us againſt rejecting any doctrine which is expreſsly and evidently revealed, though we cannot fully underſtand it. It is good ſometimes to loſe and bewilder ourſelves in ſuch ſtudies for this very reaſon, and to attain this practical advantage, this improvement in true modeſty of ſpirit.

XVI. THOUGH we ſhould always be ready to *change our ſentiments of things upon juſt conviction of their falſhood*, yet there is not the ſame neceſſity of *changing our accuſtomed* methods *of reading*, *or ſtudy and practice*, even though we have not been led at firſt into the happieſt *method*. Our thoughts may be true, though we may have hit upon an improper order of thinking. Truth does not always depend upon the moſt convenient method. There may be a certain form and order in which we have long accuſtomed ourſelves to range our ideas

and notions, which may be beſt for us now, though it was not originally beſt in itſelf. The *inconveniencies* of changing may be much greater than the *conveniencies* we could obtain by a new method.

As for inſtance; if a man in his younger days has ranged all his ſentiments in *theology* in the method of *Ames*'s *Medulla Theologiæ*, or Biſhop *Uſher*'s *Body of Divinity*, it may be much more natural and eaſy for him to continue to diſpoſe all his further acquirements in the ſame order, though perhaps neither of theſe treatiſes are in themſelves written in the moſt perfect method. So when we have long fixed our *caſes of ſhelves* in a library, and ranged our books in any particular order, *viz.* according to their languages, or according to their *ſubjects*, or according to the *alphabetical names of the authors*, &c. we are perfectly well acquainted with the order in which they now ſtand, and we can find any particular book which we ſeek, or add a new book which we have purchaſed with much greater eaſe than we do in finer caſes of ſhelves where the books were ranged in any different manner whatſoever; any different poſition of the volumes would be new and ſtrange and troubleſome to us, and would not countervail the inconveniencies of a change.

So if a man of forty years old has been taught to hold his pen awkwardly in his youth, and yet writes ſufficiently well for all the purpoſes of his ſtation, it is not worth while to teach him now the moſt accurate methods of handling that inſtrument; for this would create him more trouble without equal advantage, and perhaps he might never attain to write better after he has placed all his fingers perfectly right with this new accuracy.

CHAP. XV.

Of fixing the Attention.

A STUDENT ſhould labour by all proper methods to acquire a *ſteady fixation of thought*. *Attention* is a very neceſſary thing in order to improve our minds. The evidence of truth does not always appear immediately, nor ſtrike the ſoul at firſt ſight. It is by *long attention* and *inſpection* that we arrive at evidence, and it is for want of it we judge falſly of many things. We make haſte to determine upon a ſlight and a ſudden view; we confirm our gueſſes which ariſe from a glance; we paſs a judg-

ment while we have but a confuſed or obſcure perception, and thus plunge ourſelves into miſtakes. This is like a man, who walking in a miſt, or being at a great diſtance from any viſible object, (ſuppoſe a *tree*, a *man*, a *horſe*, or a *church*) judges much amiſs of the figure and ſituation and colours of it, and ſometimes takes one for the other; whereas if he would but withhold his judgment till he come nearer to it, or ſtay till clearer light comes, and then would fix his eyes longer upon it, he would ſecure himſelf from thoſe miſtakes.

Now in order to gain a greater *facility of attention* we may obſerve theſe *rules*.

I. *GET a good liking to the ſtudy or knowledge you would purſue.* We may obſerve that there is not much difficulty in confining the mind to contemplate what we have a great deſire to know: and eſpecially if they are matters of ſenſe, or ideas which paint themſelves upon the fancy. It is but *acquiring an hearty good-will and reſolution to ſearch out and ſurvey the various properties and parts of ſuch objects*, and our attention will be engaged if there be any delight or diverſion in the ſtudy or contemplation of them. Therefore *mathematical* ſtudies have a ſtrange influence towards fixing the attention of the mind, and giving a ſteadineſs to a wandering diſpoſition, becauſe they deal much in lines, figures and numbers, which

which affect and pleaſe the ſenſe and imagination. *Hiſtories* have a ſtrong tendency the ſame way, for they engage the ſoul by a variety of ſenſible occurrences; when it hath begun, it knows not how to leave off; it longs to know the final event through a natural curioſity that belongs to mankind. *Voyages* and *travels*, and accounts of ſtrange countries and ſtrange appearances will aſſiſt in this work. This ſort of ſtudy detains the mind by the perpetual occurrence and expectation of ſomething new, and that which may gratefully ſtrike the imagination.

II. *SOMETIMES we may make uſe of ſenſible things and corporeal images for the illuſtration of thoſe notions which are more abſtracted and intellectual.* Therefore *diagrams* greatly aſſiſt the mind in *aſtronomy* and *philoſophy*; and the *emblems* of virtues and vices, may happily teach children, and pleaſingly impreſs thoſe uſeful *moral* ideas on young minds, which perhaps might be conveyed to them with much more difficulty by mere *moral* and *abſtracted diſcourſes*.

I CONFESS in this practice of repreſenting *moral* ſubjects by pictures, we ſhould be cautious leſt we ſo far immerſe the mind in corporeal images, as to render it unfit to take in an abſtracted and intellectual idea, or cauſe it to form wrong conceptions of immaterial things. This prac-

tice therefore is rather to be uſed at firſt in order to get a fixed habit of attention, and in ſome caſes only; but it can never be our conſtant way and method of purſuing all moral, abſtracted and ſpiritual themes.

III. *APPLY yourſelf to thoſe ſtudies, and read thoſe authors who draw out their ſubjects into a perpetual chain of connected reaſonings*, wherein the following parts of the diſcourſe are naturally and eaſily derived from thoſe which go before. Several of the *mathematical ſciences*, if not all, are happily uſeful for this purpoſe. This will render the labour of ſtudy delightful to a rational mind, and will fix the powers of the underſtanding with ſtrong *attention* to their proper operations by the very pleaſure of it. *Labor ipſe voluptas*, is a happy propoſition whereſoever it can be applied.

IV. *DO not chuſe your conſtant place of ſtudy by the finery of the proſpects, or the moſt various and entertaining ſcenes of ſenſible things.* Too much light, or a variety of objects which ſtrike the eye or the ear, eſpecially while they are ever in motion or often changing, have a natural and powerful tendency to ſteal away the mind too often from its ſteady purſuit of any ſubject which we contemplate; and thereby the ſoul gets a habit of ſilly curioſity and impertinence, of trifling and wandering. *Vagario* thought himſelf

himſelf furniſhed with the beſt cloſet for his ſtudy among the beauties, gaieties and diverſions of *Kenſington* or *Hampton-Court*; but after ſeven years profeſſing to purſue learning, he was a mere novice ſtill.

V. *BE not in too much haſte to come to the determination of a difficult or important point.* Think it worth your waiting to find out truth. Do not give your aſſent up to either ſide of a queſtion too ſoon, merely on this account, that the ſtudy of it is long and difficult. Rather be contented with ignorance for a ſeaſon, and continue in ſuſpence till your *attention* and meditation and due labour have found out ſufficient evidence on one ſide. Some are ſo fond to know a great deal at once, and love to talk of things with freedom and boldneſs before they thoroughly underſtand them, that they ſcarcely ever allow themſelves *attention* enough to ſearch the matter through and through.

VI. *HAVE a care of indulging the more ſenſual paſſions and appetites of animal nature: they are great enemies to attention.* Let not the mind of a ſtudent be under the influence of any warm affection to things of ſenſe, when he comes to engage in the ſearch of truth, or the improvement of his underſtanding. A perſon under the power of love, or fear, or anger, great pain or deep ſorrow, hath ſo

little government of his ſoul, that he cannot keep it attentive to the proper ſubject of his *meditation*. The paſſions call away the thoughts with inceſſant importunity towards the object that excited them; and if we indulge the frequent riſe and roving of paſſions, we ſhall thereby procure an unſteady and unattentive habit of mind.

YET this one exception muſt be admitted, *viz.* If we can be ſo happy as to engage any paſſion of the ſoul on the ſide of the particular ſtudy which we are purſuing, it may have a great influence to fix the attention more ſtrongly to it.

VII. IT is therefore very uſeful to fix and engage the mind in the purſuit of any ſtudy, by a *conſideration of the divine pleaſures of truth and knowledge*, by a *ſenſe of our duty to God*, by a *delight in the exerciſe of our intellectual faculties*, by the *hope of future ſervice* to our fellow-creatures, and *glorious advantage to ourſelves*, both in this world and that which is to come. Theſe thoughts, though they may move our affections, yet they do it with a proper influence: theſe will rather aſſiſt and promote our *attention*, than diſturb or divert it from the ſubject of our preſent and proper meditations. A ſoul inſpired with the fondeſt love of truth, and the warmeſt aſpirations after ſincere felicity and celeſtial beatitude,

tude, will keep all its powers attentive to the inceſſant purſuit of them: paſſion is then refined, and conſecrated to its divineſt purpoſes.

CHAP. XVI.

Of enlarging the Capacity of the MIND.

THERE are three things which in an eſpecial manner go to make up that *amplitude* or *capacity of mind*, which is one of the nobleſt characters belonging to the underſtanding. (1.) *When the mind is ready to take in great and ſublime ideas without pain or difficulty.* (2.) *When the mind is free to receive new and ſtrange ideas, upon juſt evidence, without great ſurpriſe or averſion.* (3.) *When the mind is able to conceive or ſurvey many ideas at once without confuſion, and to form a true judgment derived from that extenſive ſurvey.* The perſon who wants either of theſe characters may in that reſpect be ſaid to have a *narrow genius*. Let us diffuſe our meditations a little upon this ſubject.

I. THAT is an ample and capacious mind which is *ready to take in vaſt and ſublime ideas without pain or difficulty.* Perſons

ſons who have never been uſed to converſe with any thing but the common, little, and obvious affairs of life, have acquired a narrow or contracted habit of ſoul, that they are not able to ſtretch their intellect wide enough to admit large and noble thoughts; they are ready to make their domeſtic, daily and familiar images of things, the meaſure of *all that is*, and *all that can be*.

TALK to them of the vaſt dimenſions of the *planetary worlds*; tell them that our ſtar called *Jupiter* is a ſolid globe, two hundred and twenty times bigger than the earth; that the *ſun* is a vaſt globe of fire above a thouſand times bigger than *Jupiter*; that is, two hundred and twenty thouſand times bigger than the earth; that the *diſtance from the earth to the ſun* is eighty-one millions of miles; and that a cannon bullet ſhot from the earth would not arrive at the *neareſt of the fixed ſtars* in ſome hundreds of years; they cannot bear the belief of it, but hear all theſe glorious labours of *aſtronomy* as a mere idle romance.

INFORM them of the *amazing ſwiftneſs* of the motion of ſome of the ſmalleſt or the biggeſt bodies in nature; aſſure them, according to the beſt philoſophy, that the planet *Venus* (*i. e.* our *morning* or *evening ſtar*, which is near as big as our earth,) though it ſeems to move from its place but a few yards in a month, does really fly ſeventy

venty thouſand miles in an hour; tell them that the *rays of light* ſhoot from the ſun to our earth at the rate of one hundred and eight thouſand miles in the ſecond of a minute, they ſtand aghaſt at ſuch ſort of talk, and believe it no more than the tales of *giants fifty yards high*, and the *rabbinical fables of leviathan*, who every day ſwallows a fiſh of three miles long, and is thus preparing himſelf to be the food and entertainment of the bleſſed at the feaſt of Paradiſe.

THESE unenlarged ſouls are in the ſame manner diſguſted with the wonders which the *microſcope* has diſcovered concerning the *ſhape*, the *limbs*, and *motions of ten thouſand little animals*, whoſe united bulk would not equal a pepper-corn: They are ready to give the lye to all the improvements of our ſenſes by the invention of a variety of glaſſes, and will ſcarcely believe any thing beyond the teſtimony of their naked eye without the aſſiſtance of art.

Now if we would attempt in a learned manner to relieve the minds that labour under this defect,

(1.) IT is uſeful to begin with ſome *firſt principles of Geometry*, and lead them onward by degrees to the doctrine of quantities which are *incommenſurable*, or which will admit of no common meaſure, though it be never ſo ſmall. By this means they will

will ſee the neceſſity of admitting the *infinite diviſibility of quantity* or *matter*.

THIS ſame doctrine may alſo be proved to their underſtandings, and almoſt to their ſenſes, by ſome eaſier arguments in a more obvious manner. As the very opening and cloſing of a pair of *compaſſes* will evidently prove, that if the ſmalleſt ſuppoſed part of matter or quantity be put between the points, there will be ſtill leſs and leſs diſtances or quantities all the way between the legs, till you come to the head or joint: wherefore there is no ſuch thing poſſible as the ſmalleſt quantity. But a little acquaintance with true philoſophy and mathematical learning would ſoon teach them, that there are no limits either as to the *extenſion of ſpace*, or to the *diviſion of body*, and would lead them to believe they are bodies amazingly great or ſmall beyond their preſent imagination.

(2.) IT is proper alſo to acquaint them with the *circumference of our earth*, which may be proved by very eaſy principles of *geometry*, *geography*, and *aſtronomy*, to be about twenty-four thouſand miles round, as it has been actually found to have this dimenſion by mariners who have ſailed round it. Then let them be taught that in every twenty-four hours, either the *ſun* and *ſtars* muſt all move round this earth, or the *earth* muſt turn round upon its own axis.

If

If the *earth* itſelf revolve thus, then each houſe or mountain near the equator muſt move at the rate of a thouſand miles in an hour: but if (as they generally ſuppoſe) the *ſun* or *ſtars* move round the earth, then (the circumference of their ſeveral orbits or ſpheres being vaſtly greater than this earth) they muſt have a motion prodigiouſly ſwifter than a thouſand miles an hour. Such a thought as this will by degrees enlarge their minds, and they will be taught, even upon their own principle of *the diurnal revolutions of the heavens*, to take in ſome of the vaſt dimenſions of the heavenly bodies, their ſpaces and motions.

(3.) To this ſhould be added the *uſe of teleſcopes* to help them to ſee the diſtant wonders in the ſkies; and *microſcopes* which diſcover the minuteſt part of little animals, and reveal ſome of the finer and moſt curious works of nature. They ſhould be acquainted alſo with ſome other noble *inventions of modern philoſophy*, which have a great influence to enlarge the human underſtanding, of which I ſhall take occaſion to ſpeak more under the next head.

(4.) FOR the ſame purpoſe they may be invited to read thoſe parts of *Milton*'s admirable poem, entitled *Paradiſe Loſt*, where he deſcribes the armies and powers of angels, the wars and the ſenate of devils, the creation of this earth; together with the

the deſcriptions of heaven, hell, and paradiſe.

IT muſt be granted that poeſy often deals in theſe vaſt and ſublime ideas. And even if the ſubject or matter of the poem doth not require ſuch amazing and extenſive thoughts, yet tropes and figures which are ſome of the main powers and beauties of poeſy, do ſo glorioufly exalt the matter as to give a ſublime imagination its proper reliſh and delight.

So when a boar is chaffed in hunting,

His noſtrils, flames expire,
And his red eye-balls roll with living fire.
DRYDEN.

When *Ulyſſes* with-holds and ſuppreſſes his reſentment,

His wrath compreſt
Recoiling, mutter'd thunder in his breaſt.
POPE.

BUT eſpecially where the ſubject is grand, the poet fails not to repreſent it in all its grandeur.

SO when the ſupremacy of a God is deſcribed,

He ſees with equal eye, as God of all,
A hero periſh, or a ſparrow fall:
Atoms or ſyſtems, into ruin hurl'd,
And now a bubble burſt, and now a world.
POPE.

THIS

THIS ſort of writings have a natural tendency to enlarge the capacity of the mind, and make ſublime ideas familiar to it. And inſtead of running always to the ancient *Heathen poeſy*, with this deſign, we may with equal if not ſuperior advantage, apply ourſelves to converſe with ſome of the beſt of our modern poets, as well as with the writings of the prophets, and the *poetical* parts of the Bible, *viz.* the book of *Job* and the *Pſalms*, in which ſacred authors we ſhall find ſometimes more ſublime ideas, more glorious deſcriptions, more elevated language, than the fondeſt critics have ever found in any of the *Heathen* verſifiers either of *Greece* or *Rome*; for the *eaſtern* writers uſe and allow much ſtronger figures and tropes than the *weſtern*.

Now there are many, and great, and ſacred *advantages* to be derived from this ſort of *enlargement of the mind*.

IT will lead us into more exalted apprehenſions *of the great God our Creator* than ever we had before. It will entertain our thoughts with holy wonder and amazement, while we contemplate that being who created theſe various works of ſurpriſing greatneſs, and ſurpriſing ſmallneſs; who has diſplayed moſt unconceivable *wiſdom* in the contrivance of all the parts, powers and motions of theſe little animals inviſible to the naked eye; who has manifeſted a moſt

moſt divine extent of *knowledge, power and greatneſs*, in forming, moving and managing the moſt extenſive bulk of the heavenly bodies, and in ſurveying and comprehending all thoſe unmeaſurable ſpaces in which they move. *Fancy* with all her images is fatigued and overwhelmed in following the *planetary worlds* through ſuch immenſe ſtages, ſuch aſtoniſhing journies as theſe are, and reſigns its place to the *pure intellect*, which learns by degrees to take in ſuch ideas as theſe, and to adore its Creator with new and ſublime devotion.

AND not only are we taught to form juſter ideas of the *great God* by theſe methods, but this enlargement of the mind carries us on to nobler conceptions of his *intelligent creatures*. The mind that deals only in vulgar and common ideas, is ready to imagine the *nature aud powers of man* to come ſomething too near to *God his Maker*, becauſe we do not ſee or ſenſibly converſe with any beings ſuperior to ourſelves. But when the ſoul has obtained a greater *amplitude of thought*, it will not then immediately pronounce every thing to be God which is above man. It then learns to ſuppoſe, there may be as many various ranks of beings in the inviſible world in a conſtant gradation ſuperior to us, as we ourſelves are ſuperior to all the ranks of being beneath us in this viſible world; even though we

we deſcend downward far below the *ant* and the *worm*, the *ſnail* and the *oyſter*, to the leaſt and to the dulleſt animated atoms which are diſcovered to us by *microſcopes*.

BY this means we ſhall be able to ſuppoſe what prodigious power *angels*, whether good or bad, muſt be furniſhed with, and prodigious knowledge in order to over-ſee the realms of *Perſia* and *Græcia* of old, or if any ſuch ſuperintend the affairs of *Great-Britain*, *France*, *Ireland*, *Germany*, &c. in our days: what power and ſpeed is neceſſary to deſtroy one hundred eighty-five thouſand armed men in one night in the *Aſſyrian* camp of *Sennacherib*, and all the firſt-born in the land of *Egypt* in another; both which are attributed to an angel.

BY theſe ſteps we ſhall aſcend to form more juſt ideas of the knowledge and grandeur, the power and glory of the *Man Jeſus Chriſt*, who is intimately united to God, and is one with him. Doubtleſs he is furniſhed with ſuperior powers to all the angels in Heaven, becauſe he is employed in ſuperior work, and appointed to be the ſovereign Lord of all the viſible and inviſible worlds. It is his human nature, in which *the Godhead dwells bodily*, that is advanced to theſe honours and to this empire; and perhaps there is little or nothing in the government of the kingdoms of nature, and grace, but what is tranſacted by the *Man*

Jeſus, inhabited by the *divine power and wiſdom*, and employed as a medium or conſcious inſtrument of this extenſive gubernation.

II. I PROCEED now to conſider the next thing wherein the *capacity* or *amplitude of the mind* conſiſts, and that is, when the mind is *free to receive new and ſtrange ideas and propoſitions upon juſt evidence without any great ſurpriſe or averſion*. Thoſe who confine themſelves within the circle of their own hereditary ideas and opinions, and who never give themſelves leave ſo much as to examine or believe any thing beſide the dictates of their own family or ſect, or party, are juſtly charged with a *narrowneſs of ſoul*. Let us ſurvey ſome inſtances of this imperfection, and then direct to the cure of it.

(1.) PERSONS who have been bred up all their days within the ſmoke of their father's chimney, or within the limits of their native town or village, are ſurpriſed at every new ſight that appears, when they travel a few miles from home. The *plowman* ſtands amazed at the ſhops, the trade, the crowds of people, the magnificent buildings, the pomp and riches and equipage of the court and city, and would hardly believe what was told him before he ſaw it. On the other hand, the *cockney* travelling into the country is ſurpriſed at many actions

of the quadruped and winged animals in the field, and at many common practices of rural affairs.

IF either of theſe happen to hear an account of the familiar and daily cuſtoms of foreign countries, they pronounce them at once indecent and ridiculous: ſo *narrow* are their underſtandings, and their thoughts ſo confined, that they know not how to believe any thing *wiſe* or *proper*, beſides what they have been taught to practiſe.

THIS *narrowneſs of mind* ſhould be cured by *hearing and reading the accounts of different parts of the world, and the hiſtories of paſt ages, and of nations and countries diſtant from our own*, eſpecially the more polite parts of mankind. Nothing tends in this reſpect ſo much to enlarge the mind, as travelling, *i. e.* making a viſit to other towns, cities or countries, beſides thoſe in which we were born and educated: and where our condition of life does not grant us this privilege, we muſt endeavour to ſupply the want of it by books.

(2.) IT is the ſame *narrowneſs of mind* that awakens the ſurpriſe and averſion of ſome perſons, when they hear of *doctrines and ſchemes in human affairs or in religion* quite different from what they have embraced. Perhaps they have been trained up from their infancy in one ſet of notions, and their thoughts have been confined to

one ſingle tract both in the civil or religious life, without ever hearing or knowing what other opinions are current among mankind: or at leaſt they have ſeen all other notions beſides their own, repreſented in a falſe and malignant light, whereupon they judge and condemn at once every ſentiment but what their own party receives, and they think it a piece of juſtice and truth to lay heavy cenſures upon the practice of every different ſect in *chriſtianity* or *politics*. They have ſo rooted themſelves in the opinions of their party, that they cannot hear an *objection* with patience, nor can they bear a vindication, or ſo much as an *apology*, for any ſet of principles beſide their own: all the reſt is *nonſenſe* or *hereſy*, *folly* or *blaſphemy*.

THIS defect alſo is to be relieved by *free converſation with perſons of different ſentiments*; this will teach us to bear with patience a defence of opinions contrary to our own. If we are ſcholars, we ſhould alſo read the objections againſt our own tenets, and view the principles of other parties, as they are repreſented in their own authors, and not merely in the citations of thoſe who would confute them. We ſhould take an honeſt and unbiaſſed ſurvey of the force of reaſoning on all ſides, and bring all to the teſt of unprejudiced reaſon and divine revelation. *Note*, This is not to be

be done in a raſh and ſelf-ſufficient manner; but with a humble dependance on divine wiſdom and grace while we walk among ſnares and dangers.

BY ſuch a free converſe with perſons of different ſects (eſpecially thoſe who differ only in particular forms of chriſtianity, but agree in the *great and neceſſary doctrines* of it) we ſhall find that there are perſons of good ſenſe and virtue, perſons of piety and worth, perſons of much candour and goodneſs, who belong to different parties, and have imbibed ſentiments oppoſite to each other. This will ſoften the roughneſs of an unpoliſhed ſoul, and enlarge the avenues of our charity towards others, and incline us to receive them into all the degrees of unity and affection which the word of God requires.

(3.) I MIGHT borrow further illuſtrations both of this *freedom* and this *averſion to receive new truths*, from modern *aſtronomy* and *natural philoſophy*. How much is the vulgar part of the world ſurpriſed at the talk of the *diurnal and annual revolutions of the earth?* They have ever been taught by their ſenſes and their neighbours, to imagine the *earth* ſtands fixed in the centre of the univerſe, and that the *ſun* with all the *planets* and the *fixed ſtars* are whirled round this little globe once in twenty-four hours; not conſidering that

ſuch a diurnal motion, by reaſon of the diſtance of ſome of thoſe heavenly bodies, muſt be almoſt infinitely ſwifter and more inconceivable than any which the modern aſtronomers attribute to them. Tell theſe perſons that the *ſun* is fixed in the centre, that the *earth*, with all the *planets*, roll round the ſun in their ſeveral periods, and that the *moon* rolls round the earth in a leſſer circle, while together with the earth ſhe is carried round the ſun; they cannot admit a ſyllable of this new and ſtrange doctrine, and they pronounce it utterly contrary to all ſenſe and reaſon.

ACQUAINT them that there are *four moons* alſo perpetually rolling round the planet *Jupiter*, and carried along with him in his periodical circuit round the ſun, which little moons were never known till the year 1610, when *Galileo* diſcovered them by his teleſcope; inform them that *Saturn* has five moons of the ſame kind attending him; and that the *body of that planet* is encompaſſed with a broad flat circular ring, diſtant from the planet twenty-one thouſand miles, and twenty-one thouſand miles broad, they look upon theſe things as tales and fancies, and will tell you that the glaſſes do but delude your eyes with vain images; and even when they themſelves conſult their own eyeſight in the uſe of theſe tubes, the *narrowneſs*

rowneſs of their mind is ſuch, that they will ſcarcely believe their ſenſes when they dictate ideas ſo new and ſtrange.

AND if you proceed further, and attempt to lead them into a belief that all theſe *planetary worlds are habitable*, and it is probable they are repleniſhed with intellectual beings dwelling in bodies, they will deride the folly of him that informs them; for they reſolve to believe there are no habitable worlds but this *earth*, and no ſpirits dwelling in bodies beſides *mankind*; and it is well if they do not fix the brand of *hereſy* on the man who is leading them out of their long impriſonment, and looſing the fetters of their ſouls.

THERE are many other things relating to *mechanical experiments*, and to the properties of the air, water, fire, iron, the loadſtone, and other minerals and metals, as well as the doctrine of the ſenſible qualities, *viz.* colours, ſounds, taſtes, *&c.* which this rank of men cannot believe for want of a greater *amplitude of mind.*

THE beſt way to convince them, is by giving them ſome acquaintance with the *various experiments* in philoſophy, and proving by *ocular demonſtration* the multiform and amazing operations of the *air-pump*, the *loadſtone*, the *chemical furnace*, *optical glaſſes*, and *mechanical engines*. By this means the underſtanding will ſtretch itſelf

by degrees, and when they have found there are ſo many new and ſtrange things that are moſt evidently true, they will not be ſo forward to condemn every new propoſition in any of the other ſciences, or in the affairs of religion or civil life.

III. THE *capacity of the underſtanding* includes yet another qualification in it, and that is an *ability to receive many ideas at once without confuſion*. The ample mind takes a ſurvey of ſeveral objects with one glance, keeps them all within ſight and preſent to the ſoul, that they may be compared together in their mutual reſpects; it forms juſt judgments, and it draws proper inferences from this compariſon even to a great length of argument, and a chain of demonſtrations.

THE *narrowneſs* that belongs to human ſouls in general, is a great imperfection and impediment to wiſdom and happineſs. There are but few perſons who can contemplate, or practiſe ſeveral things at once; our faculties are very limited, and while we are intent upon one part or property of a ſubject, we have but a ſlight glimpſe of the reſt, or we loſe it out of ſight. But it is a ſign of a *large and capacious mind*, if we can with one ſingle view take in a variety of objects; or at leaſt when the mind can apply itſelf to ſeveral objects with ſo ſwift a ſucceſſion, and in ſo few moments, as

attains almoſt the ſame ends as if it were all done in the ſame inſtant.

THIS is a neceſſary qualification in order to great *knowledge* and *good judgment:* for there are ſeveral things in human life, in religion, and in the ſciences, which have various circumſtances, appendices and relations attending them; and without a ſurvey of all thoſe ideas which ſtand in connection with, and relation to each other, we are often in danger of paſſing a falſe judgment on the ſubject propoſed. It is for this reaſon there are ſo numerous controverſies found among the learned and unlearned world, in matters of *religion* as well as in the affairs of *civil government*. The notions of *ſin, and duty to God and our fellow-creatures; of law, juſtice, authority, and power; of covenant, faith, juſtification, redemption, and grace; of church, biſhop, preſbyter, ordination,* &c. contain in them ſuch complicated ideas, that when we are to judge of any thing concerning them, it is hard to take into our view at once all the attendants or conſequents that muſt and will be concerned in the determination of a ſingle queſtion: and yet without a due attention to many, or moſt of theſe, we are in danger of determining that queſtion amiſs.

IT is owing to the narrowneſs of our minds, that we are expoſed to the ſame peril

peril in the *matters of human duty and prudence*. In many things which we do, we ought not only to conſider the *mere naked action* itſelf, but the perſons *who act*, the perſons *toward whom*, the time *when*, the place *where*, the manner *how*, the end *for which* the action is done, together with the effects that *muſt* or that *may follow*, and all other ſurrounding circumſtances: theſe things muſt neceſſarily be taken into our view, in order to determine whether the action, which is indifferent in itſelf, be either lawful or unlawful, good or evil, wiſe or fooliſh, decent or indecent, proper or improper, as it is ſo circumſtantiated.

LET me give a plain inſtance for the illuſtration of this matter. *Mario* kills a dog, which, conſidered merely in itſelf, ſeems to be an indifferent action: now the dog was *Timon*'s, and not his own; this makes it look unlawful. But *Timon* bid him do it; this gives it an appearance of lawfulneſs again. It was done at church, and in time of divine ſervice; theſe circumſtances added, caſt on it an air of irreligion. But the dog flew at *Mario*, and put him in danger of his life; this relieves the ſeeming impiety of the action. Yet *Mario* might have eſcaped by flying thence; therefore the action appears to be improper. But the dog was known to be mad; this further circumſtance makes it almoſt neceſſary that the dog

dog ſhould be ſlain, leſt he might worry the aſſembly, and do much miſchief. Yet again, *Mario* killed him with a piſtol, which he happened to have in his pocket ſince yeſterday's journey, now hereby the whole congregation was terrified and diſcompoſed, and divine ſervice was broken off; this carries an appearance of great indecency and impropriety in it: but after all, when we conſider a further circumſtance, that *Mario* being thus violently aſſaulted by a mad dog had no way of eſcape, and had no other weapon about him, it ſeems to take away all the colours of impropriety, indecency or unlawfulneſs, and to allow that the preſervation of one or many lives will juſtify the act as wiſe and good. Now all theſe concurrent appendices of the action ought to be ſurveyed, in order to pronounce with juſtice and truth concerning it.

THERE are a multitude of human actions in private life, in domeſtic affairs, in traffic, in civil government, in courts of juſtice, in ſchools of learning, *&c.* which have ſo many complicated circumſtances, aſpects and ſituations, with regard to time and place, perſons and things, that it is impoſſible for any one to paſs a right judgment concerning them, without entering into moſt of theſe circumſtances, and ſurveying them extenſively, and comparing and balancing them all aright.

WHENCE

WHENCE by the way, I may take occaſion to ſay, how many thouſands are there who take upon them to paſs their cenſures on the perſonal and the domeſtic actions of others, who pronounce boldly on the affairs of the public, and determine the juſtice or madneſs, the wiſdom or folly of national adminiſtrations, of peace and war, *&c.* whom neither God nor men ever qualified for ſuch a poſt of judgment? they were not capable of entering into the numerous concurring ſprings of action, nor had they ever taken a ſurvey of the twentieth part of the circumſtances which were neceſſary for ſuch judgments or cenſures.

IT is the *narrowneſs of our minds*, as well as the vices of the will, that oftentimes prevents us from taking a full view of all the complicated and concurring appendices that belong to human actions: thence it comes to paſs that there is ſo little right judgment, ſo little juſtice, prudence, or decency, practiſed among the bulk of mankind; thence ariſe infinite reproaches and cenſures, alike fooliſh and unrighteous. You ſee therefore how needful and happy a thing it is, to be poſſeſt of ſome meaſure of this *amplitude of ſoul*, in order to make us very wiſe, or knowing, or juſt, or prudent, or happy.

I CONFESS this ſort of *amplitude or capacity of Mind* is in a great meaſure the gift

gift of nature, for ſome are born with much more capacious ſouls than others.

THE genius of *ſome perſons* is ſo poor and limited, that they can hardly take in the connection of two or three propoſitions unleſs it be in matters of ſenſe, and which they have learnt by experience; they are utterly *unfit for ſpeculative ſtudies:* it is hard for them to diſcern the difference betwixt *right* and *wrong* in matters of reaſon on any abſtracted ſubjects; theſe ought never to ſet up for *ſcholars*, but apply themſelves to thoſe arts and profeſſions of life which are to be learnt at an eaſier rate, by ſlow degrees and daily experience.

OTHERS have a ſoul a little more capacious, and they can take in the connection of a few propoſitions pretty well; but if the chain of conſequences be a little prolix, here they ſtick and are confounded. If perſons of this *make* ever devote themſelves to *ſcience*, they ſhould be well aſſured of a ſolid and ſtrong conſtitution of body, and well reſolved to bear the fatigue of hard labour and diligence in ſtudy: *if the iron be blunt*, king *Solomon* tells us *we muſt put more ſtrength.*

BUT, in the *third place*, there are *ſome* of ſo bright and happy a genius, and ſo ample a mind, that they can take in a long train of propoſitions, if not at once, yet in a very few moments, and judge well concerning

cerning the dependance of them. They can ſurvey a variety of complicated ideas without fatigue or diſturbance; and a number of truths offering themſelves as it were in one view to their underſtanding, doth not perplex or confound them. This makes a great man.

Now though there may be much owing to nature in this caſe, yet experience aſſures us that even a lower degree of this capacity and extent of thought may be increaſed by diligence and application, by frequent exerciſe, and the obſervation of ſuch *rules* as theſe.

I. *LABOUR by all means to gain an attentive and patient temper of mind*, a power of confirming and fixing your thoughts ſo long on any one appointed ſubject, till you have ſurveyed it on every ſide and in every ſituation, and run through the ſeveral powers, parts, properties, and relations, effects and conſequences of it. He whoſe thoughts are very fluttering and wandering, and cannot be fixed attentively to a few ideas ſucceſſively, will never be able to ſurvey many and various objects diſtinctly at once, but will certainly be overwhelmed and confounded with the multiplicity of them. The rules for *fixing the attention* in the former chapter are proper to be conſulted here.

II. *ACCUSTOM yourſelf to clear and diſtinct ideas in every thing you think of.* Be not

not ſatisfied with obſcure and confuſed conceptions of things, eſpecially where clearer may be obtained: for one obſcure or confuſed idea, eſpecially if it be of great importance in the queſtion, intermingled with many clear ones, and placed in its variety of aſpects towards them, will be in danger of ſpreading confuſion over the whole ſcene of ideas, and thus may have an unhappy influence to overwhelm the underſtanding with darkneſs, and pervert the judgment. A little black paint will ſhamefully tincture and ſpoil twenty gay colours.

CONSIDER yet further, that if you content yourſelf frequently with *words inſtead of ideas*, or with *cloudy and confuſed notions* of things, how impenetrable will that darkneſs be, and how vaſt and endleſs that confuſion which muſt ſurround and involve the underſtanding, when many of theſe obſcure and confuſed ideas come to be ſet before the ſoul at once? and how impoſſible will it be to form a clear and juſt judgment about them.

III. USE all diligence to *acquire* and *treaſure up a large ſtore of ideas* and notions: take every opportunity to add ſomething to your ſtock; and by frequent recollection fix them in your memory: nothing tends to confirm and enlarge the memory like a frequent review of its poſſeſſions, then the brain being well furniſhed with

with various traces, ſignatures and images, will have a rich treaſure always ready to be propoſed or offered to the ſoul, when it directs its thought towards any particular ſubject. This will gradually give the mind a faculty of ſurveying many objects at once; as a *room* that is richly adorned and hung round with a *great variety of pictures*, ſtrikes the eye almoſt at once with all that variety, eſpecially if they have been well ſurveyed one by one at firſt: this makes it habitual and more eaſy to the inhabitants to take in many of thoſe painted ſcenes with a ſingle glance or two.

HERE *note*, that by acquiring a rich *treaſure of notions*, I do not mean only *ſingle ideas*, but alſo *propoſitions*, *obſervations* and *experiences*, with *reaſonings* and *arguments* upon the various ſubjects that occur among natural or moral, common or ſacred *affairs*; that when you are called to judge concerning any queſtion, you will have ſome principles of truth, ſome uſeful axioms and obſervations always ready at hand to direct and aſſiſt your judgment.

IV. IT is neceſſary that we ſhould as far as poſſible *entertain and lay up our daily new ideas, in a regular order*, and range the acquiſitions of our ſouls under proper heads, whether of *divinity*, *law*, *phyſics*, *mathematics*, *morality*, *politics*, *trade*, *domeſtic life*, *civility*, *decency*, &c. whether of

of *cauſe*, *effect*, *ſubſtance*, *mode*, *power*, *property*, *body*, *ſpirit*, &c. we ſhould inure our minds to method and order continually; and when we take in any freſh ideas, occurrences and obſervations, we ſhould diſpoſe of them in their proper places, and ſee how they ſtand and agree with the reſt of our notions on the ſame ſubject: as a *ſcholar* would diſpoſe of a *new book* on a proper ſhelf among its kindred authors; or as an *officer* at the poſt-houſe in *London* diſpoſes of every *letter* he takes in, placing it in the box that belongs to the proper road or county.

IN any of theſe caſes if things lay *all in a heap*, the addition of any new object would increaſe the confuſion; but *method* gives a ſpeedy and ſhort ſurvey of them with eaſe and pleaſure. *Method* is of admirable advantage to keep our ideas from a confuſed mixture, and to preſerve them ready for every uſe. The ſcience of *ontology*, which diſtributes all *beings*, and all the *affections of being*, whether *abſolute* or *relative*, under *proper claſſes*, is of good ſervice to keep our intellectual acquiſitions in ſuch order, as that the mind may ſurvey them at once.

V. As *method* is neceſſary for the improvement of the mind, in order to make your treaſure of ideas moſt uſeful; ſo in all your *further purſuits of truth, and ac-*

quirement of rational knowledge, obſerve a regular progreſſive method. Begin with the moſt ſimple, eaſy and obvious ideas; then by degrees join two, and three, and more of them together: thus the complicated ideas growing up under your eye and obſervation, will not give the ſame confuſion of thought as they would do if they were all offered to the mind at once, without your obſerving the original and formation of them. An eminent example of this appears in the ſtudy of *arithmetic*. If a ſcholar juſt admitted into the ſchool obſerves his maſter performing an operation in the *rule of diviſion*, his head is at once diſturbed and confounded with the manifold compariſons of the numbers of the *diviſor* and *dividend*, and the multiplication of the one and ſubtraction of it from the other: but if he begin regularly at *addition*, and ſo proceed by *ſubtraction* and *multiplication*, he will then in a few weeks be able to take in an intelligent ſurvey of all thoſe operations in *diviſion*, and to practiſe them himſelf with eaſe and pleaſure, each of which at firſt ſeemed all intricacy and confuſion.

An illuſtration of the like nature may be borrowed from *geometry* and *algebra*, and other mathematical practices: how eaſily does an *expert geometrican* with one glance of his eye, take in a complicated diagram made up of many *lines and circles*,

cles, angles, and arches? how readily does he judge of it, whether the demonſtration deſigned by it be true or falſe? It was by degrees he arrived at this ſtretch of underſtanding; he began with a *ſingle line* or a *point*; he joined *two lines* in an *angle*; he advanced to *triangle* and *ſquare*, *polygons*, and *circles*; thus the powers of his underſtanding were ſtretched and augmented daily, till by diligence and regular application he acquired this extenſive faculty of mind.

BUT this advantage does not belong only to *mathematical learning*. If we apply ourſelves at firſt in any ſcience to clear and ſingle ideas, and never hurry ourſelves on to the following and more complicated parts of knowledge till we thoroughly underſtand the foregoing, we may practiſe the ſame method of *enlarging the capacity of the ſoul* with ſucceſs in any one of the ſciences, or in the affairs of life and religion.

BEGINNING with *A, B, C,* and making *ſyllables* out of *letters*, and *words* out of *ſyllables*, has been the foundation of all that glorious ſuperſtructure of *arts* and *ſciences*, which have enriched the minds and libraries of the learned world in ſeveral ages. Theſe are the firſt ſteps by which the ample and capacious ſouls among mankind have arrived at that prodigious extent of knowledge, which renders them the wonder and glory of the nation where they live.

Though *Plato* and *Cicero*, *Deſcartes* and Mr. *Boyle*, Mr. *Locke* and Sir *Iſaac Newton*, were doubtleſs favoured by nature with a genius of uncommon amplitude; yet in their early years and firſt attempts of ſcience, this was but limited and narrow in compariſon of what they attained at laſt. But how vaſt and capacious were thoſe powers which they afterwards acquired by patient *attention* and watchful *obſervation*, by the purſuit of *clear ideas* and a *regular method* of thinking.

VI. ANOTHER means of acquiring this amplitude and capacity of mind, is a *peruſal of difficult entangled queſtions, and of the ſolution of them in any ſcience. Speculative* and *caſuiſtical divinity* will furniſh us with many ſuch caſes and controverſies. There are ſome ſuch difficulties in reconciling ſeveral parts of the epiſtles of St. *Paul* relating to the *Jewiſh* law and the *Chriſtian* goſpel; a happy ſolution whereof will require ſuch an extenſive view of things, and the reading of theſe happy ſolutions will enlarge this faculty in younger ſtudents. In *morals* and *political* ſubjects, *Puffendorf*'s *Law of Nature and Nations*, and ſeveral determinations therein, will promote the ſame amplitude of mind. An attendance on public trials and arguments in the *civil* courts of juſtice, will be of good advantage for this purpoſe; and after a man

has ſtudied the general principles of the law of nature and the laws of *England* in proper books, the reading the *reports of adjudged caſes*, collected by men of great ſagacity and judgment, will richly improve his mind toward acquiring this deſirable amplitude and extent of thought, and more eſpecially in perſons of that profeſſion.

CHAP. XVII.

Of improving the MEMORY.

MEMORY is a diſtinct faculty of the mind of man, very different from perception, judgment and reaſoning, and its other powers. Then we are ſaid to *remember* any thing, *when the idea of it ariſes in the mind with a conſciouſneſs at the ſame time that we have had this idea before.* Our memory is our natural power of retaining what we learn, and of recalling it on every occaſion. Therefore we can never be ſaid to *remember* any thing, whether it be ideas or propoſitions, words or things, notions or arguments, of which we have not

had ſome former idea or perception, either by *ſenſe or imagination, thought or reflection*; but whatſoever we learn from obſervation, books or converſation, *&c.* it muſt all be laid up and preſerved in the memory, if we would make it really uſeful.

So neceſſary and ſo excellent a faculty is the *memory* of man, that all other abilities of the mind borrow from hence their beauty and perfection; for other capacities of the ſoul are almoſt uſeleſs without this. To what purpoſe are all our labours in knowledge and wiſdom, if we want memory to preſerve and uſe what we have acquired? What ſignify all other intellectual or ſpiritual improvements, if they are loſt as ſoon as they are obtained? It is memory alone that enriches the mind, by preſerving what our labour and induſtry daily collect. In a word, there can be neither knowledge, nor arts, nor ſciences without memory; nor can there be any improvement of mankind in virtue or morals, or the practice of religion without the aſſiſtance and influence of this power. Without memory the ſoul of man would be but a poor deſtitute naked being, with an everlaſting blank ſpread over it, except the fleeting ideas of the preſent moment.

MEMORY is very uſeful to thoſe *who ſpeak*, as well as to thoſe *who learn*. It aſſiſts

aſſiſts the *teacher* and the *orator*, as well as the ſcholar or the hearer. The beſt ſpeeches and inſtructions are almoſt loſt, if thoſe who hear them immediately forget them. And thoſe who are called to ſpeak in public are much better heard and accepted, when they can deliver their diſcourſe by the help of a lively genius and a ready memory, than when they are forced to read all that they would communicate to their hearers. Reading is certainly a heavier way of the conveyance of our ſentiments; and there are very few mere readers, who have the felicity of penetrating the ſoul and awakening the paſſions of thoſe who hear, by ſuch a grace and power of oratory, as the man who ſeems to talk every word from his very heart, and pours out the riches of his own knowledge upon the people round about him by the help of a free and copious memory. This gives life and ſpirit to every thing that is ſpoken, and has a natural tendency to make a deeper impreſſion on the minds of men: it awakens the dulleſt ſpirits, cauſes them to receive a diſcourſe with more affection and pleaſure, and adds a ſingular grace and excellency both to the perſon and his oration.

A *good judgment* and a *good memory* are very different qualifications. A perſon may have a very ſtrong, capacious, and retentive

memory, where the judgment is very poor and weak; as ſometimes it happens in thoſe who are but one degree above an idiot, who have manifeſted an amazing ſtrength and extent of memory, but have hardly been able to join or disjoin two *or three* ideas in a wiſe and happy manner, to make a ſolid rational propoſition.

THERE have been inſtances of others who have had but a very tolerable power of *memory*, yet their *judgment* has been of a much ſuperior degree, juſt and wiſe, ſolid and excellent.

YET it muſt be acknowledged, that where a happy memory is found in any perſon, there is one good foundation laid for a wiſe and juſt judgment of things, whereſoever the natural genius has any thing of ſagacity and brightneſs to make a right uſe of it. A *good judgment* muſt always in ſome meaſure depend upon a ſurvey and compariſon of ſeveral things together in the mind, and determining the truth of ſome doubtful propoſition by that ſurvey and compariſon. When the mind has, as it were, ſet all thoſe various objects preſent before it, which are neceſſary to form a true propoſition or judgment concerning any thing, it then determines that ſuch and ſuch ideas are to be joined or disjoined, to be affirmed or denied; and this in a conſiſtency and correſpondence with all thoſe other ideas or propoſitions

poſitions which any way relate or belong to the ſame ſubject. Now there can be no ſuch comprehenſive ſurvey of many things without a tolerable degree of memory; it is by reviewing things paſt we learn to judge of the future: and it happens ſometimes, that if one needful or important object or idea be abſent, the judgment concerning the thing enquired will thereby become falſe or miſtaken.

You will *enquire* then, How comes it to paſs, that there are ſome perſons who appear in the world of buſineſs as well as in the world of learning, to have a good judgment, and have acquired the juſt character of prudence and wiſdom, and yet have neither a very bright genius nor ſagacity of thought, nor a very happy memory, ſo that they cannot ſet before their minds at once a large ſcene of ideas, in order to paſs a judgment,

Now we may learn from *Penſoroſo* ſome account of this difficulty. You ſhall ſcarcely ever find this man forward in judging and determining things propoſed to him: but he always takes time, and delays, and ſuſpends, and ponders things maturely, before he paſſes his judgment: then he practiſes a ſlow meditation, ruminates on the ſubject, and thus perhaps in two or three nights and days rouſes and awakens thoſe ſeveral ideas, one after another as he

can,

can, which are neceſſary in order to judge right of the thing propoſed, and makes them paſs before his review in ſucceſſion: this he doth to relieve the want both of a quick ſagacity of thought, and of a ready memory and ſpeedy recollection; and this caution and practice, lays the foundation of his juſt judgment and wiſe conduct. He ſurveys well before he judges.

WHENCE I cannot but take occaſion to infer one good rule of advice, to perſons of higher as well as lower genius, and of large as well as narrow memories, *viz.* That they do not too haſtily pronounce concerning matters of doubt or enquiry, where there is not an urgent neceſſity of preſent action. The bright genius is ready to be ſo forward as often betrays itſelf into great errors in judgment, ſpeech and conduct, without a continual guard upon itſelf, and uſing the bridle of the tongue. And it is by this delay and precaution, that many a perſon of much lower natural abilities, ſhall often excel perſons of the brighteſt genius in wiſdom and prudence.

IT is often found, that a fine genius has but feeble memory: for where the genius is bright, and the imagination vivid, the power of memory may be too much neglected and loſe its improvement. An active fancy readily wanders over a multitude of objects, and is continually enter-

taining itſelf with new flying images; it runs through a number of new ſcenes or new pages with pleaſure, but without due attention, and ſeldom ſuffers itſelf to dwell long enough upon any one of them to make a deep impreſſion thereof upon the mind, and commit it to laſting remembrance. This is one plain and obvious reaſon, why there are ſome perſons of very bright parts and active ſpirits, who have but ſhort and narrow powers of remembrance; for having riches of their own, they are not ſolicitous to borrow.

And as ſuch a quick and various fancy and invention may be ſome hindrance to the attention and memory, ſo a mind of a good retentive ability, and which is ever crowding its memory with things which it learns and reads continually, may prevent, reſtrain and cramp the invention itſelf. The memory of *Lectorides*, is ever ready upon all occaſions to offer to his mind ſomething out of other men's writings or converſations, and is preſenting him with the thoughts of other perſons perpetually: thus the man who had naturally a good flowing invention, does not ſuffer himſelf to purſue his own thoughts. Some perſons who have been bleſt by nature with ſagacity and no contemptible genius, have too often forbid the exerciſe of it, by tying themſelves down to the memory of the volumes they have read, and the ſentiments of other men contained in them.

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WHERE the memory has been almoſt conſtantly employing itſelf in ſcraping together new acquirements, and where there has not been a judgment ſufficient to diſtinguiſh what things were fit to be recommended and treaſured up in the memory, and what things were idle, uſeleſs, or needleſs, the mind has been filled with a wretched heap and hotchpotch of words or ideas, and the ſoul may be ſaid to have had *large* poſſeſſions, but *no true riches.*

I HAVE read in ſome of Mr. *Milton*'s writings a very beautiful ſimile, whereby he repreſents the books of the *fathers*, as they are called in the *Chriſtian* church. Whatſoever, ſaith he, old Time with his huge drag-net has conveyed down to us along the ſtream of ages, whether it be ſhells or ſhell-fiſh, jewels or pebbles, ſticks or ſtraws, ſea-weeds or mud, theſe are the *antients*, theſe are the *fathers*. The caſe is much the ſame with the memorial poſſeſſions of the greateſt part of mankind. A few uſeful things perhaps, mixed and confounded with many trifles and all manner of rubbiſh, fill up their memories and compoſe their intellectual poſſeſſions. It is a great happineſs therefore to diſtinguiſh things aright, and to lay up nothing in the memory but what has ſome juſt value in it, and is worthy to be numbered as a part of our treaſure.

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WHATSOEVER improvements are to the mind of man from the wiſe exerciſe of his own reaſoning powers, theſe may be called his proper *manufactures*; and whatſoever he borrows from abroad, theſe may be termed his *foreign treaſures:* both together make a wealthy and happy mind.

How many excellent judgments and reaſonings are framed in the mind of a man of wiſdom and ſtudy in a length of years? How many worthy and admirable notions has he been poſſeſſed of in life, both by his own reaſonings and by his prudent and laborious collections in the courſe of his reading? But alas! how many thouſands of them vaniſh away again and are loſt in empty air, for want of a ſtronger and more retentive memory? When a young practitioner in the law was once ſaid to conteſt a point of debate with that great lawyer in the laſt age, ſerjeant *Maynard*, he is reported to have anſwered him, *Alas, young man, I have forgot much more law than ever thou haſt learnt or read.*

WHAT an unknown and unſpeakable happineſs would it be to a man of judgment, and who is engaged in the purſuit of knowledge, if he had but a power of ſtamping all his own beſt ſentiments upon his memory in ſome indelible characters; and if he could but imprint every valuable paragraph and ſentiment of the moſt excellent

cellent authors he has read, upon his mind, with the ſame ſpeed and facility with which he read them? If a man of good genius and ſagacity could but retain and ſurvey all thoſe numerous, thoſe wiſe and beautiful ideas at once, which have ever paſſed through his thoughts upon any one ſubject, how admirably would he be furniſhed to paſs a juſt judgment about all preſent objects and occurrences? What a glorious entertainment and pleaſure would fill and felicitate his ſpirit, if he could graſp all theſe in a ſingle ſurvey; as the ſkilful eye of a painter runs over a fine and complicate piece of hiſtory wrought by the hand of a *Titian* or a *Raphael*, views the whole ſcene at once, and feeds himſelf with the extenſive delight? But theſe are joys that do not belong to mortality.

THUS far I have indulged ſome looſe and unconnected thoughts and remarks with regard to the different powers of *wit*, *memory* and *judgment*. For it was very difficult to throw them into a regular form or method without more room. Let us now with more regularity treat of the *memory* alone.

THOUGH the *memory* be a natural faculty of the mind of man, and belongs to ſpirits which are not incarnate, yet it is greatly aſſiſted or hindered, and much diverſified by the brain or the animal nature,

to

to which the ſoul is united in this preſent ſtate. But what part of the brain that is, wherein the images of things lie treaſured up, is very hard for us to determine with certainty. It is moſt probable that thoſe very fibres, pores or traces of the brain, which aſſiſt at the firſt idea or perception of any object, are the ſame which aſſiſt alſo at the recollection of it: and then it will follow that the memory has no ſpecial part of the brain devoted to its own ſervice, but uſes all thoſe parts in general, which ſubſerve our ſenſations as well as our thinking and reaſoning powers.

As the memory grows and improves in young perſons from their childhood, and decays in old age, ſo it may be increaſed by art and labour, and proper exerciſe; or it may be injured and quite ſpoiled by ſloth, or by a diſeaſe, or a ſtroke on the head. There are ſome reaſonings on this ſubject, which make it evident, that the *goodneſs of a memory* depends in a great degree upon the conſiſtence and the temperature of that part of the brain, which is appointed to aſſiſt the exerciſe of all our ſenſible and intellectual faculties.

So for inſtance, *in children*; they perceive and forget a hundred things in an hour; the brain is ſo ſoft, that it receives immediately all impreſſions like water or liquid mud, and retains ſcarcely any of them:

all

all the traces, forms or images which are drawn there, are immediately effaced or cloſed up again, as though you wrote with your finger on the ſurface of a river or on a veſſel of oil.

ON the contrary, *in old age*, men have a very feeble remembrance of things that were done of late, *i. e.* the ſame day or week or year; the brain is grown ſo hard, that the preſent images or ſtrokes make little or no impreſſion, and therefore they immediately vaniſh: *Priſco* in his ſeventy-eighth year, will tell long ſtories of things done when he was in the battle at the *Boyne* almoſt fifty years ago, and when he ſtudied at *Oxford* ſeven years before; for thoſe impreſſions were made when the brain was more ſuſceptive of them; they have been deeply engraven at the proper ſeaſon, and therefore they remain. But words or things which he lately ſpoke or did, they are immediately forgotten, becauſe the brain is now grown more dry and ſolid in its conſiſtence, and receives not much more impreſſion than if you wrote with your finger on a floor of clay, or a plaiſtered wall.

BUT in the middle ſtage of life, or it may be from fifteen to fifty years of age, the memory is generally in its happieſt ſtate, the brain eaſily receives and long retains the images and traces which are impreſſed upon

on it, and the natural ſpirits are more active to range theſe little infinite unknown figures of things in their proper cells or cavities, to preſerve and recollect them.

WHATSOEVER therefore keeps the brain in its beſt temper and conſiſtence, may be a help to preſerve the memory: but exceſs of wine or luxury of any kind, as well as exceſs in the ſtudies of learning or the buſineſſes of life, may overwhelm the memory, by overſtraining and weakening the fibres of the brain, overwaſting the ſpirits, injuring the true conſiſtence of that tender ſubſtance, and confounding the images that are laid up there.

A *good memory* has theſe ſeveral qualifications, (1.) It is *ready to receive and admit with* great *eaſe*, the various ideas both of words and things which are learned or taught. (2.) It is *large and copious to treaſure up* theſe ideas in great number and variety. (3.) It is *ſtrong and durable to retain* for a conſiderable time thoſe words or thoughts which are committed to it. (4.) It is *faithful and active to ſuggeſt and recollect* upon every proper occaſion, all thoſe words or thoughts which have been recommended to its care, or treaſured up in it.

NOW in every one of theſe qualifications a memory may be injured, or may be improved: yet I ſhall not inſiſt diſtinctly on theſe particulars, but only in general propoſe a few *rules* or *directions*, whereby this

noble faculty of *memory* in all its branches and qualifications may be preſerved or aſſiſted, and ſhew what are the practices that both by reaſon and experience have been found of happy influence to this purpoſe.

THERE is one great and *general direction* which belongs to the improvement of other powers as well as of the *memory*, and that is, *to keep it always in due and proper exerciſe*. Many acts by degrees form a habit, and thereby the ability or power is ſtrengthened and made more ready to appear again in action. Our memories ſhould be uſed and inured from childhood to bear a moderate quantity of knowledge let into them early, and they will thereby become ſtrong for uſe and ſervice. As any limb well and duly exerciſed grows ſtronger, the nerves of the body are corroborated thereby. *Milo* took up a calf, and daily carried it on his ſhoulders: as the calf grew, his ſtrength grew alſo, and he at laſt arrived at firmneſs of joints enough to bear the bull.

OUR memories will be in a great meaſure moulded and formed, improved or injured, according to the exerciſe of them. If we never uſe them they will be almoſt loſt. Thoſe who are wont to converſe or read about a few things only, will retain but a few in their memory: thoſe who are uſed to remember things but for an hour, and charge their memories with it no longer, will retain them but an hour before they vaniſh,

and

and let words be remembered as well as things, that ſo you may acquire a *copia verborum* as well as *rerum*, and be more ready to expreſs your mind on all occaſions.

YET there ſhould be a caution given in ſome caſes: the memory of a child, or any infirm perſon, ſhould not be overburdened; for a limb or a joint may be overſtrained by being too much loaded, and its natural power never to be recovered. Teachers ſhould wiſely judge of the power and conſtitution of youth, and impoſe no more on them than they are able to bear with cheerfulneſs and improvement.

AND particularly they ſhould take care, that the memory of the learner be not too much crowded with a tumultuous heap or over-bearing multitude of documents or ideas at one time; this is the way to remember nothing; one idea effaces another. An over-greedy graſp does not retain the largeſt handful. But it is the *exerciſe of memory* with a due moderation, that is one *general rule* towards the improvement of it.

THE *particular rules* are ſuch as theſe:

1. *DUE attention and diligence to learn and know things* which we would commit to our remembrance, is a rule of great neceſſity in this caſe. When the attention is ſtrongly fixed to any particular ſubject, all that is ſaid concerning it, makes a deeper impreſſion upon the mind. There

are ſome perſons who complain they cannot remember divine or human diſcourſes which they hear, when in truth their thoughts are wandering half the time, or they hear with ſuch coldneſs and indifferency and a trifling temper of ſpirit, that it is no wonder the things which are read or ſpoken make but a ſlight impreſſion on the brain, and get no firm footing in the ſeat of memory, but ſoon vaniſh and are loſt.

IT is needful therefore, if we would maintain a long remembrance of the things which we read or hear, that we ſhould engage our delight and pleaſure in thoſe ſubjects, and uſe the other methods which are before preſcribed in order to *fix the attention*. Sloth, indolence, and idleneſs, will no more bleſs the mind with intellectual riches, than it will fill the hand with grain, the field with corn, or the purſe with treaſure.

LET it be added alſo, that not only the ſlothful and the negligent deprive themſelves of proper knowledge for the furniture of their memory, but ſuch as appear to have active ſpirits, who are ever ſkimming over the ſurface of things with a volatile temper, will fix nothing in their mind. *Vario* will ſpend whole mornings in running over looſe and unconnected pages, and with freſh curioſity is ever glancing over new words and ideas that ſtrike his preſent fancy:

fancy: he is fluttering over a thouſand objects of art and ſcience, and yet treaſures up but little knowledge. There muſt be the labour and the diligence of cloſe attention to particular ſubjects of thought and enquiry, which only can impreſs what we read or think of upon the remembering faculty in man.

2. *CLEAR and diſtinct apprehenſion of the things which we commit to memory*, is neceſſary, in order to make them ſtick and dwell there. If we would remember words, or learn the names of perſons or things, we ſhould have them recommended to our memory by clear and diſtinct pronunciation, ſpelling or writing. If we would treaſure up the ideas of things, notions, propoſitions, arguments and ſciences, theſe ſhould be recommended alſo to our memory by a clear and diſtinct perception of them. Faint glimmering and confuſed ideas will vaniſh like images ſeen in twilight. Every thing which we learn, ſhould be conveyed to the underſtanding in the plaineſt expreſſions without any ambiguity, that we may not miſtake what we deſire to remember. This is a general rule whether we would employ the memory about words or things; though it muſt be confeſt, that mere ſounds and words are much harder to get by heart than the knowledge of things and real images.

FOR this reaſon take heed (as I have often before warned) that you do not take up with *words* inſtead of *things*, nor mere *ſounds* inſtead of real *ſentiments* and *ideas*. Many a lad forgets what has been taught him, merely becauſe he never well underſtood it: he never clearly and diſtinctly took in the meaning of thoſe ſounds and ſyllables which he was required to get by heart.

THIS is one true reaſon why boys makes ſo poor a proficiency in learning the *Latin* tongue, under maſters who teach them by grammars and rules written in *Latin*, of which I have ſpoken before. And this is a common caſe with children when they learn their catechiſms in their early days. The language and the ſentiments conveyed in thoſe catechiſms are far above the underſtanding of creatures of that age, and they have no tolerable ideas under the words. This makes the anſwers much harder to be remembered, and in truth they learn nothing but words without ideas; and if they are ever ſo perfect in repeating the words, yet they know nothing of divinity.

AND for this reaſon it is a neceſſary rule in teaching children the principles of religion, that they ſhould be expreſſed in very plain, eaſy, and familiar words, brought as low as poſſible down to their underſtandings, according to their different ages and capacities,

capacities, and thereby they will obtain ſome uſeful knowledge when the words are treaſured up in their memory, becauſe at the ſame time they will treaſure up thoſe divine ideas too.

3. *METHOD and regularity in the things we commit to memory*, is neceſſary, in order to make them take more effectual poſſeſſion of the mind, and abide there long. As much as *ſyſtematical* learning is decried by ſome vain and humourous triflers of the age, it is certainly the happieſt way to furniſh the mind with a variety of knowledge.

WHATSOEVER you would truſt to your memory let it be diſpoſed in a proper method, connected well together, and referred to diſtinct and particular heads or claſſes both general and particular. An apothecary's boy will much ſooner learn all the medicines in his maſter's ſhop, when they are ranged in boxes or on ſhelves according to their diſtinct natures, whether herbs, drugs or minerals, whether leaves or roots, whether *chymical* or *galenical* preparations, whether ſimple or compound, *&c.* and when they are placed in ſome order according to their nature, their fluidity, or their conſiſtence, *&c.* in phials, bottles, gallipots, caſes, drawers, *&c.* So the genealogy of a family is more eaſily learnt when you begin at ſome great grandfather

as the root, and diſtinguiſh the ſtock, the large boughs, the leſſer branches, the twigs, and the buds, till you come down to the preſent infants of the houſe. And indeed all ſorts of arts and ſciences taught in a method ſomething of this kind, are more happily committed to the mind or memory.

I MIGHT give another plain ſimile to confirm the truth of this. What horſe or carriage can take up and bear away all the various, rude and unwieldy loppings of a branchy tree at once? But if they are divided yet further, ſo as to be laid cloſe, and bound up in a more uniform manner into ſeveral faggots, perhaps thoſe loppings may be all carried as one ſingle load or burden.

THE mutual dependance of things on each other, help the memory of both. A wiſe connection of the parts of a diſcourſe in a rational method, gives great advantage to the reader or hearer, in order to his remembrance of it. Therefore many *mathematical* demonſtrations in a long train, may be remembered much better than a heap of ſentences which have no connection. The book of *Proverbs*, at leaſt from the tenth chapter and onwards, is much harder to remember, than the book of *Pſalms* for this reaſon: and ſome chriſtians have told me, that they remember what is written in the epiſtle to the *Romans*, and that to the *Hebrews*,

Hebrews, much better than many others of the ſacred epiſtles, becauſe there is more exact method and connection obſerved in them.

HE that would learn to remember a ſermon which he hears, ſhould acquaint himſelf by degrees with the method in which the ſeveral important parts of it are delivered. It is a certain fault in a multitude of preachers, that they utterly neglect method in their harangues: or at leaſt they refuſe to render their method viſible and ſenſible to the hearers. One would be tempted to think it was for fear leſt their auditors ſhould remember too much of their ſermons, and prevent their preaching them three or four times over: but I have candour enough to perſuade myſelf, that the true reaſon is, they imagine it to be a more modiſh way of preaching without particulars; I am ſure it is a much more uſeleſs one. And it would be of great advantage both to the ſpeaker and hearer, to have diſcourſes for the pulpit caſt into a plain and eaſy method, and the reaſons or inferences ranged in a proper order, and that under the words, *firſtly*, *ſecondly*, and *thirdly*, however they may be now fancied to ſound unpolite or unfaſhionable: but archbiſhop *Tillotſon* did not think ſo in his days.

4. *A*

4. *A frequent review and careful repetition* of the things we would learn, *and an abridgment of them in a narrow compaſs for this end*, has a great influence to fix them in the memory: therefore it is that the rules of *grammar*, and uſeful examples of the variation of words, and the peculiar forms of ſpeech in any language, are ſo often appointed by the maſter as leſſons for the ſcholars to be frequently repeated; and they are contracted into tables for frequent review, that what is not fixed in the mind at firſt, may be ſtamped upon the memory by a perpetual ſurvey and rehearſal.

REPETITION is ſo very uſeful a practice, that *Mnemon*, even from his youth to his old age, never read a book without making ſome ſmall points, daſhes or hooks in the margin, to mark what parts of the diſcourſe were proper for a review: and when he came to the end of a ſection or chapter, he always ſhut his book, and recollected all the ſentiments or expreſſions he had remarked, ſo that he could give a tolerable *analyſis and abſtract* of every treatiſe he had read, juſt after he had finiſhed it. Thence he became ſo well furniſhed with a rich variety of knowledge.

EVEN when a perſon is hearing a ſermon, or a lecture, he may give his thoughts leave now and then to ſtep back ſo far, as to recollect

recollect the ſeveral heads of it from the beginning, two or three times before the lecture or ſermon is finiſhed: the omiſſion or the loſs of a ſentence or two among the amplifications, is richly compenſated by preſerving in the mind the method and order of the whole diſcourſe in the moſt important branches of it.

IF we would fix in the memory the diſcourſes we hear, or what we deſign to ſpeak, *let us abſtract them into brief compends*, and review them often. Lawyers and Divines have need of ſuch aſſiſtances: *they write down ſhort notes or hints of the principal heads* of what they deſire to commit to their memory, in order to preach or plead; for ſuch abſtracts and epitomies may be reviewed much ſooner, and the ſeveral amplifying ſentiments or ſentences will be more eaſily invented or recollected in their proper places. The art of *ſhort hand* is of excellent uſe for this as well as other purpoſes. It muſt be acknowledged, that thoſe who ſcarcely ever take a pen in their hands to write ſhort notes or hints of what they are to ſpeak or learn, who never try to caſt things into method, or to contract the ſurvey of them, in order to commit them to their memory, had need have a double degree of that natural power of retaining and recollecting what they read or hear, or intend to ſpeak.

DO not plunge yourſelf into other buſineſſes or ſtudies, amuſements or recreations, immediately after you have attended upon inſtruction, if you can well avoid it. Get time if poſſible to recollect the things you have heard, that they may not be waſhed all away from the mind by a torrent of other occurrences or engagements, nor loſt in the croud or clamour of other loud and importunate affairs.

TALKING over the things which you have read with your companions on the firſt proper opportunity you have for it, is a moſt uſeful manner of review or repetition, in order to fix them upon the mind. Teach them your younger friends, in order to eſtabliſh your own knowledge while you communicate it to them. The animal powers of your tongue and of your ear, as well as your intellectual faculties, will all join together to help the memory. *Hermetas* ſtudied hard in a remote corner of the land, and in ſolitude, yet he became a very learned man. He ſeldom was ſo happy as to enjoy ſuitable ſociety at home, and therefore he talked over to the fields and the woods in the evening what he had been reading in the day, and found ſo conſiderable advantage by this practice, that here commended it to all his friends, ſince he could ſet his *probatum* to it for ſeventeen years.

5. *PLEA-*

5. *PLEASURE and delight in the things we learn*, gives great aſſiſtance towards the remembrance of them. Whatſoever therefore we deſire that a child ſhould commit to his memory, make it as pleaſant to him as poſſible; endeavour to ſearch his genius and his temper; and let him take in the inſtructions you give him, or the leſſons you appoint him, as far as may be, in a way ſuited to his natural inclination. *Fabellus* would never learn any moral leſſons till they were moulded into the form of ſome fiction or fable like thoſe of *Æſop*, or till they put on the appearance of a parable, like thoſe wherein our bleſſed *Saviour* taught the ignorant world: then he remembered well the emblematical inſtructions that were given him, and learnt to practiſe the moral ſenſe and meaning of them. Young *Spectorius* was taught virtue, by ſetting before him a variety of examples of the various good qualities in human life; and he was appointed daily to repeat ſome ſtory of this kind out of *Valerius Maximus*. The ſame lad was early inſtructed to avoid the common vices and follies of youth in the ſame manner. This is a-kin to the method whereby the *Lacedæmonians* trained up their children to hate drunkenneſs and intemperance, *viz.* by bringing a drunken man into their company, and ſhewing them what

what a beaſt he had made of himſelf. Such viſible and ſenſible forms of inſtruction will make long and uſeful impreſſions upon the memory.

CHILDREN may be taught to remember many things in a way of ſport and play. Some young creatures have learnt their letters and ſyllables, and the pronouncing and ſpelling of words, by having them paſted or written upon many little flat tablets or dies. Some have been taught vocabularies of different languages, having a word in one tongue written on one ſide of theſe tablets, and the ſame word in another tongue on the other ſide of them.

THERE might be alſo many entertaining contrivances for the inſtruction of children in ſeveral things relating to *geometry*, *geography* and *aſtronomy*, in ſuch alluring and illuſory methods, which would make a moſt agreeable and laſting impreſſion on their minds.

6. THE memory of uſeful things may receive conſiderable aid *if they are thrown into verſe:* for the numbers and meaſures, and rhyme, according to the poeſy of different languages have a conſiderable influence upon mankind, both to make them receive with more eaſe the things propoſed to their obſervation, and preſerve them longer in their remembrance. How many are there of the common affairs of human

life, which have been taught ine arly years by the help of rhyme, and have been like *nails faſtened in a ſure place* and riveted by daily uſe?

So the number of the days of each month are engraven on the memory of thouſands by theſe four lines:

Thirty days have September,
June *and* April *and* November:
February *twenty-eight alone,*
And all the reſt have thirty-one.

So lads have been taught frugality by ſurveying and judging of their own expences by theſe three lines:

Compute the pence but of one day's expence,
So many pounds and angels, groats and pence
Are ſpent in one whole year's circumference.

FOR the number of days in a year is three hundred ſixty-five, which number of pence make one pound, one angel, one groat, and one penny.

So have rules of health been preſcribed in the book called *Schola Salernitana*, and many a perſon has preſerved himſelf doubtleſs from evening gluttony, and the pains and diſeaſes conſequent upon it, by theſe two lines:

Ex

Ex magnâ cœnâ ſtomacho ſit maxima pœna;
Ut ſis nocte levis, ſit tibi cœna brevis.

Engliſhed:

To be eaſy all night
Let your ſupper be light:
Or elſe you'll complain
Of a ſtomach in pain.

AND a hundred *proverbial* ſentences in various languages are formed into rhyme or a verſe, whereby they are made to ſtick upon the memory of old and young.

IT is from this principle that *moral rules* have been caſt into a *poetic mould* from all antiquity. So the golden verſes of the *Pythagoreans* in *Greek? Cato*'s diſtichs *De Moribus* in *Latin*; *Lilly*'s precepts to ſcholars called *Qui mihi*, with many others; and this has been done with very good ſucceſs. A line or two of this kind recurring on the memory, have often guarded youth from a temptation to vice and folly, as well as put them in mind of their preſent duty.

IT is for this reaſon alſo that the *genders*, *declenſions*, and *variations* of nouns and verbs have been taught in verſe, by thoſe who have complied with the prejudice of long cuſtom, to teach *Engliſh* children the *Latin* tongue by rules written in *Latin*:

And

and truly thoſe rude heaps of words and terminations of an unknown tongue, would have never been ſo happily learnt by heart by a hundred thouſand boys without this ſmoothing artifice; nor indeed do I know any thing elſe can be ſaid with good reaſon, to excuſe or relieve the obvious abſurdities of this practice.

WHEN you would remember new things or words, *endeavour to aſſociate and connect them with ſome words or things which you have well known before, and which are fixed and eſtabliſhed in your memory.* This aſſociation of ideas is of great importance and force, and may be of excellent uſe in many inſtances of human life. One idea which is familiar to the mind, connected with others which are new and ſtrange, will bring thoſe new ideas into eaſy remembrance. *Maronides* had got the firſt hundred lines of *Virgil's Æneis* printed upon his memory ſo perfectly, that he knew not only the order and number of every verſe from one to a hundred in perfection, but the order and number of every word in each verſe alſo; and by this means he would undertake to remember two or three hundred names of perſons or things by ſome rational or fantaſtic connection between ſome word in the verſe, and ſome letter, ſyllable, property, or accident of the name or thing to be remembered, even though they had been re-

peated but once or twice at moſt in his hearing. *Animato* practiſed much the ſame art of memory by getting the *Latin* names of twenty-two animals into his head according to the alphabet, *viz. aſinus, baſiliſcus, canis, draco, elephas, felis, gryphus, hircus, juvencus, leo, mulus, noctua, ovis, panthera, quadrupes, rhinoceros, ſimia, taurus, urſus, xiphias, hyæna* or *yæna, zibetta.* Moſt of theſe he divided alſo into four parts, *viz.* head and body, feet, fins or wings and tail, and by ſome arbitrary or chimerical attachment of each of theſe to a word or thing which he deſired to remember, he committed them to the care of his memory, and that with good ſucceſs.

IT is alſo by this *aſſociation of ideas*, that we may better imprint any new idea upon the memory by joining with it ſome *circumſtance* of the *time, place, company*, &c. wherein we firſt obſerved, heard or learnt it. If we would recover an abſent idea, it is uſeful to recollect thoſe circumſtances of time, place, *&c.* The ſubſtance will many times be recovered and brought to the thoughts by recollecting the ſhadow: a man recurs to our fancy by remembering his garment, his ſize, or ſtature, his office, or employment, *&c.* A beaſt, bird, or fiſh by its colour, figure or motion,

by

by the cage or court-yard, or ciſtern wherein it was kept.

To this head alſo we may refer that remembrance of names and things, which may be derived from our recollection of their *likeneſs to other things* which we know; either their reſemblance in name, character, form, accident, or any thing that belongs to them. An idea or word which has been loſt or forgotten, has been often recovered by hitting upon ſome other kindred word or idea, which has the neareſt reſemblance to it, and that in the letters, ſyllables or ſound of the name, as well as properties of the thing.

IF we would remember *Hippocrates* or *Galen*, or *Paracelſus*, think of a phyſician's name, beginning with *H. G.* or *P.* If we will remember *Ovidius Naſo*, we may repreſent a man with a great noſe; if *Plato*, we may think upon a perſon with large ſhoulders; if *Criſpus*, we ſhall fancy another with curled hair; and ſo of other things.

AND ſometimes a new or ſtrange idea may be fixed in the memory, by conſidering its *contrary* or *oppoſite*. So if we cannot hit on the word *Goliath*, the remembrance of *David* may recover it: or the name of a *Trojan* may be recovered by thinking of a *Greek*, &c.

8. IN ſuch caſes wherein it may be done, *ſeek after a local memory*, or a remembrance

of what you have read by the ſide or page where it is written or printed; whether the right or the left, whether at the top, the middle, or the bottom; whether at the beginning of a chapter or a paragraph, or the end of it. It has been ſome advantage for this reaſon, to accuſtom one's ſelf to books of the ſame edition: and it has been of conſtant and ſpecial uſe to divines and private chriſtans, to be furniſhed with ſeveral *Bibles* of the ſame edition; that whereſoever they are, whether in their chamber, parlour or ſtudy, in the younger or elder years of life, they may find the chapters and verſes ſtanding in the ſame parts of the page.

THIS is alſo a great conveniency to be obſerved by printers in the new editions of *Grammars*, *Pſalms*, *Teſtaments*, &c. to print every chapter, paragraph or verſe in the ſame part of the page as the former, that ſo it may yield an happy aſſiſtance to thoſe young learners who find, and even feel the advantage of a *local memory*.

9. LET every thing we deſire to remember *be fairly and diſtinctly written and divided into periods, with large characters in the beginning*, for by this means we ſhall the more readily imprint the matter and words on our minds, and recollect them with a glance, the more remarkable the writing appears to the *eye*. This *ſenſe* con-

conveys the ideas to the fancy better than any other; and what we have *ſeen*, is not ſo ſoon forgotten as what we have only heard. What *Horace* affirms of the *mind* or *paſſions* may be ſaid alſo of the *memory*.

Segnius irritant animos demiſſa per aurem
Quam quæ ſunt oculis ſubjecta fidelibus, & quæ
Ipſe ſibi tradit ſpectator.

Applied thus in *Engliſh*:

Sounds which addreſs the ear are loſt and die
In one ſhort hour; but that which ſtrikes the eye
Lives long upon the mind; the faithful ſight
Engraves the knowledge with a beam of light.

FOR the aſſiſtance of weak memories, the firſt letters or words of every period, in every page, may be written in diſtinct colours; yellow, green, red, black, &c. and if you obſerve the ſame order of colours in the following ſentences, it may be ſtill the better. This will make a greater impreſſion, and may much aid the memory.

UNDER this head we may take notice of the advantage which the memory gains, by having the *ſeveral objects of our learning drawn out into ſchemes and tables*; matters of *mathematical* ſcience and *natural philoſophy* are not only let into the underſtanding, but preſerved in the memory by *figures* and *diagrams*. The ſi-

tuation of the ſeveral parts of the earth are better learnt by one day's converſing with a *map* or *ſea-chart*, than by mere reading the deſcription of their ſituation a hundred times over in books of *geography*. So the conſtellations in *aſtronomy* and their poſition in the heavens, are more eaſily remembered by hemiſpheres of the ſtars well drawn. It is by having ſuch ſort of memorials, figures and tables hung round our ſtudies or places of reſidence or reſort, that our memory of theſe things will be greatly aſſiſted and improved, as I have ſhewn at large in the twentieth chapter, of the *Uſe of the Sciences*.

I MIGHT add here alſo, that *once writing over* what we deſign to remember, and giving due attention to what we write, will fix it more in the mind than reading it five times. And in the ſame manner, if we had a plan of the naked lines of longitude and latitude, projected on the *meridian* printed for this uſe, a learner might much more ſpeedily advance himſelf in the knowledge of *geography* by his own drawing the figures of all the parts of the world upon it by imitation, than by many days ſurvey of a map of the world ſo printed. The ſame alſo may be ſaid concerning the conſtellations of heaven, drawn by the learner on a naked projection of the circles of the ſphere upon the plane of the *equator*.

10. IT

10. IT has ſometimes been the practice of men to imprint names or ſentences on their memory, by *taking the firſt letters of every word of that ſentence, or of thoſe names*, and making a new word out of them. So the name of the *Maccabees* is borrowed from the firſt letters of the *Hebrew* words which make that ſentence *Mi Camoka Baelim Jehovah*, i. e. who is like thee among the gods? Which was written on their banners. *Jeſus Chriſt* our ſaviour hath been called a *fiſh*, in *Greek* IXΘΥΣ, by the fathers, becauſe theſe are the firſt letters of thoſe *Greek* words, *Jeſus Chriſt, God's Son, the Saviour*. So the word *vibgyor* teaches us to remember the order of the ſeven original colours, as they appear by the ſun-beams caſt through a priſm on a white paper, or formed by the ſun in a rainbow, according to the different refrangibility of the rays, *viz. violet, indigo, blue, green, yellow, orange* and *red*.

IN this manner the *Hebrew* grammarians teach their ſtudents to remember the letters which change their natural pronunciation by the inſcription of a *dageſh*, by gathering theſe ſix letters, *beth, gimel, daleth, caph, pe* and *thau*, into the word *begadchephat*; and that they might not forget the letters named *quieſcent*, viz. *a, h, v* and *i*, they are joined in the word *ahevi*.

So the univerſal and particular propoſitions in *logic*, are remembered by the words *barbara*, *celarent*, *darii*, &c.

OTHER artificial helps to memory may be juſt mentioned here,

DR. *Grey* in his book called *Memoria Technica*, has exchanged the figures 1, 2, 3, 4, 5, 6, 7, 8, 9, for ſome conſonants, *b*, *d*, *t*, *f*, *l*, *y*, *p*, *k*, *n*, and ſome vowels, *a*, *e*, *i*, *o*, *u*, and ſeveral diphthongs, and thereby formed words that denote numbers, which may be more eaſily remembered: and Mr. *Lowe* has improved his ſcheme in a ſmall pamphlet called *Mnemonics delineated*, whereby in ſeven leaves he has comprized almoſt an infinity of things in ſcience and in common life, and reduced them to a ſort of meaſure like *Latin* verſe; though the words may be ſuppoſed to be very barbarous, being ſuch a mixture of vowels and conſonants as are very unfit for harmony.

BUT after all, the very writers on this ſubject have confeſſed, that ſeveral of theſe *artificial* helps of memory are ſo cumberſome as not to be ſuitable to every temper or perſon; nor are they of any uſe for the delivery of a diſcourſe by memory, nor of much ſervice in learning the ſciences: but they may be ſometimes practiſed for the aſſiſting our remembrance of certain ſentences, numbers, or names.

CHAP.

CHAP. XVIII.

Of determining a QUESTION.

I. WHEN a ſubject is propoſed to your thoughts, *conſider whether it be knowable at all, or no*; and then whether it be not above the reach of your enquiry and knowledge in the *preſent ſtate*; and remember that it is a great waſte of time, to buſy yourſelves too much amongſt *unſearchables:* the chief of theſe ſtudies is to keep the mind humble, by finding its own ignorance and weakneſs.

II. *CONSIDER* again *whether the matter be worthy of your enquiry* at all; and then, how far it may be worthy of your preſent ſearch and labour according to your age, your time of life, your ſtation in the world, your capacity, your profeſſion, your chief deſign and end. There are many things worthy enquiry to one man, which are not ſo to another; and there are things that may deſerve the ſtudy of the ſame perſon in one part of life, which would be improper or impertinent at another. To read books of the *art of preaching*, or diſputes about *church diſcipline*, are proper for a *theological ſtudent* in the end of his *academical* ſtudies, but not

at the beginning of them. To purſue *mathematical* ſtudies very largely may be uſeful for a *profeſſor of philoſophy*, but not for a *divine*.

III. *CONSIDER whether the ſubject of your enquiry be eaſy or difficult; whether you have ſufficient foundation or ſkill, furniture and advantages for the purſuit of it.* It would be madneſs for a young *ſtatuary* to attempt at firſt to carve a *Venus* or a *Mercury*, and eſpecially without proper tools. And it is equally folly for a man to pretend to make great improvements in *natural philoſophy* without due experiments.

IV. *CONSIDER whether the ſubject be any ways uſeful or no*, before you engage in the ſtudy of it: often put this queſtion to yourſelves, *Cui bono?* to what purpoſe? what end will it attain? Is it for the glory of God, for the good of men, for your own advantage, for the removal of any natural or moral evil, for the attainment of any natural or moral good? Will the profit be equal to the labour? There are many ſubtle impertinencies learnt in the ſchools, many painful trifles even among the *mathematical* theorems and problems, many *difficiles nugæ*, or laborious follies of various kinds, which ſome ingenious men have been engaged in. A due reflection upon theſe things will call the mind away from

from vain amuſements, and ſave much time.

V. *CONSIDER what tendency it has to make you wiſer and better,* as well as to make you *more learned*; and thoſe queſtions which tend to wiſdom and prudence in our conduct among men, as well as piety toward God, are doubtleſs more important, and preferable beyond all thoſe enquiries which only improve our knowledge in mere ſpeculations.

VI. If the queſtion appear to be well worth your diligent application, and you are furniſhed with the neceſſary requiſites to purſue it, then *conſider whether it be dreſt up and entangled in more words than is needful,* and contain or include *more complicated ideas than is neceſſary:* and if ſo, endeavour to reduce it to a greater ſimplicity and plainneſs, which will make the enquiry and argument eaſier and plainer all the way.

VII IF it be ſtated in *an improper, obſcure, or irregular form,* it may be meliorated by *changing the phraſe, or tranſpoſing the parts of it:* but be careful always to keep the *grand and important point of enquiry the ſame* in your new ſtating the queſtion. Little tricks and deceits of ſophiſtry, by ſliding in, or leaving out ſuch words as entirely change the queſtion, ſhould be abandoned and renounced by all fair

fair diſputants, and honeſt ſearchers after truth.

THE *ſtating a queſtion with clearneſs and juſtice*, goes a great way many times toward the anſwering it. The greateſt part of true knowledge lies in a *diſtinct perception of things which are in themſelves diſtinct*; and ſome men give more light and knowledge by the bare *ſtating of the queſtion* with perſpicuity and juſtice, than others by *talking of it in groſs confuſion for whole hours together*. To *ſtate a queſtion* is but to ſeparate and diſentangle the parts of it from one another, as well as from every thing which doth not concern the queſtion, and then to lay the diſentangled parts of the queſtion in due order and method: oftentimes without more ado this fully reſolves the doubt, and ſhews the mind where the truth lies, whithout argument or diſpute.

VIII. IF the queſtion relate to an *axiom* or *firſt principle of truth*, remember that a long train of conſequences may depend upon it, *therefore it ſhould not be ſuddenly admitted and received*.

IT is not enough to determine the truth of a propoſition, much leſs to raiſe it to the honour of an *axiom* or *firſt principle*; to ſay, that it has been believed through many ages, that it has been received by many nations, that it is almoſt univerſally acknowledged or nobody denies it, that it

it is eſtabliſhed by human laws, or that temporal penalties or reproaches will attend the diſbelief of it.

IX. *NOR is it enough to forbid any propoſition the title of an axiom, becauſe it has been denied by ſome perſons,* and *doubted of by others;* for ſome perſons have been *unreaſonably credulous,* and others have been as *unreaſonably ſceptical.* Then only ſhould a propoſition be called an *axiom* or a *ſelf-evident truth,* when by a moderate attention to the ſubject and predicate, their connection appears in ſo plain a light and ſo clear an evidence, as needs no third idea or middle term to prove them to be connected.

X. WHILE you are in ſearch after truth in queſtions of a doubtful nature, or ſuch as you have not yet thoroughly examined, *keep up a juſt indifference to either ſide of the queſtion,* if you would be led honeſtly into the truth: for a deſire or inclination leaning to either ſide, biaſſes the judgment ſtrangely; whereas by this indifference for every thing but truth, you will be excited to examine fairly inſtead of preſuming, and your aſſent will be ſecured from going beyond your evidence.

XI. FOR the moſt part people are born to their opinions, and never queſtion the truth of what *their family* or *their country,* or *their party* profeſs. They clothe their minds as they do their bodies, after the

faſhion in vogue, nor one of a hundred ever examines their principles. It is ſuſpected of *lukewarmneſs* to ſuppoſe examination neceſſary, and it will be charged as a *tendency to apoſtacy* if we go about to examine them. Perſons are applauded for preſuming they are in the right, and (as Mr. *Locke* ſaith) he that conſiders and enquires into the reaſon of things is counted a *foe to orthodoxy*, becauſe poſſibly he may deviate from ſome of the received doctrines. And thus men without any induſtry or acquiſition of their own, (lazy and idle as they are) inherit *local truths*, i. e. the truths of that place where they live, and are inured to aſſent without evidence.

THIS hath a long and unhappy influence; for if a man bring his mind once to be poſitive and fierce for propoſitions whoſe evidence he hath never examined, and that in matters of the greateſt concernment, he will naturally follow this ſhort and eaſy way of judging and believing in caſes of leſs moment, and build all his opinions upon inſufficient grounds.

XII. IN determining a queſtion, eſpecially when it is a matter of difficulty and importance, *do not take up with partial examination*, but turn your thoughts on all ſides, to gather in all the light you can toward the ſolution of it. Take time, and uſe all the helps that are to be attained before

fore you fully determine, except only where preſent neceſſity of action calls for ſpeedy determination.

IF you would know what may be called a *partial examination*, take theſe inſtances, *viz.*

WHEN you examine an *object of ſenſe*, or enquire into ſome matter of *ſenſation* at too *great a diſtance* from the object, or in an *inconvenient ſituation* of it, or under any *indiſpoſition* of the *organs*, or any *diſguiſe* whatſoever relating to the *medium* or the *organ* of the *object* itſelf; or when you examine it by *the ſenſe only*, where others might be employed? Or when you enquire into it by *ſenſe only*, without the uſe of the *underſtanding* and *judgment* and *reaſon*.

IF it be a queſtion which is to be *determined* by *reaſon* and *argument*, then your examination is partial, when you turn the queſtion only in one light and do not turn it on all ſides; when you look upon it only in its relations and aſpects to one ſort of object and not to another; when you conſider only the advantages of it and the reaſons for it, and neglect to think of the reaſons againſt it, and never ſurvey its inconveniencies too: when you determine on a ſudden, before you have given yourſelf a due time for weighing all circumſtances, *&c.*

AGAIN,

AGAIN, If it be a *queſtion of fact depending upon the report or teſtimony of men*, your examination is but partial, when you enquire only what one man or a few ſay, and avoid the teſtimony of others; when you only aſk what thoſe report who were not eye or ear-witneſſes, and neglect thoſe who ſaw and heard it; when you content yourſelf with mere looſe and general talk about it, and never enter into particulars; or when there are many who deny the fact, and you never concern yourſelf about their reaſons for denying it, but reſolve to believe only thoſe who affirm it.

THERE is yet further a fault in your partial examination of any queſtion, when you reſolve to determine it by *natural reaſon* only, where you might be aſſiſted by *ſupernatural revelation*; or when you decide the point by *ſome word or ſentence*, or by *ſome part of revelation*; without comparing it with *other parts*, which might give further light and better help to determine the meaning.

IT is alſo a culpable partiality, if you examine ſome *doubtful* or *pretended viſion* or *revelation without the uſe of reaſon*; or without the uſe of that *revelation*, which is undoubted and ſufficiently proved to be divine. Theſe are all inſtances of *imperfect examination*, and we ſhould never determine a queſtion

a queſtion by one or two lights, where we may have the advantage of three or four.

XIII. TAKE heed leſt ſome *darling notion*, ſome *favourite hypotheſis*, ſome *beloved doctrine*, or ſome *common but unexamined opinion*, be made a *teſt of the truth or falſhood of all other propoſitions about the ſame ſubject*. Dare not build much upon ſuch a notion or doctrine till it be very fully examined, accurately adjuſted, and ſufficiently confirmed. Some perſons by indulging ſuch a practice, have been led into long ranks of errors; they have found themſelves involved in a train of miſtakes, by taking up ſome pretty *hypotheſis* or principle, either in *philoſophy*, *politics*, or *religion*, upon ſlight and inſufficient grounds, and eſtabliſhing that as a teſt and rule by which to judge of all other things.

XIV. FOR the ſame reaſon, have a care of *ſuddenly determining any one queſtion on which the determination of any kindred or parallel caſes will eaſily* or *naturally follow*. Take heed of receiving any wrong turn in your early judgment of things; be watchful, as far as poſſible, againſt any falſe bias which may be given to the underſtanding, eſpecially in younger years. The indulgence of ſome one ſilly opinion, or the giving credit to one fooliſh fable, lays the mind open to be impoſed upon by many. The ancient *Romans* were taught to believe,

that *Romulus* and *Remus* the founders of their ſtate and empire, were *expoſed in the woods and nurſed by a wolf:* this ſtory prepared their minds for the reception of any tales of the like nature relating to other countries. *Trogus Pompeius* would enforce the belief, that *one of the antient kings of* Spain *was alſo nurſed and ſuckled by a hart*, from the fable of *Romulus* and *Remus*. It was by the ſame influence they learned to give up their hopes and fears to *omens* and *ſoothſaying*, when they were once perſuaded that the greatneſs of their empire and the glory of *Romulus* their founder, were predicted by the happy omen of *twelve vultures appearing to him when he ſought where to build the city*. They readily received all the following legends of *prodigies*, *auguries*, and *prognoſtics*, for many ages together, with which *Livy* has furniſhed his huge hiſtory.

So the child who is once taught to believe any one occurrence to be a *good* or *evil omen*, or any day of the month or week to be *lucky* or *unlucky*, hath a wide inroad made on the ſoundneſs of his underſtanding in the following judgments of his life; he lies ever open to all the filly impreſſions and idle tales of nurſes, and imbibes many a fooliſh ſtory with greedineſs, which he muſt unlearn again if ever he become acquainted with truth and wiſdom.

XV.

XV. HAVE a care of *intereſting your warm and religious zeal* in thoſe matters which are not ſufficiently evident in themſelves, or which are not fully and thoroughly examined and proved: for this zeal, whether right or wrong, when it is once engaged, will have a powerful influence to eſtabliſh your own minds in thoſe doctrines which are really doubtful, and to ſtop up all the avenues of further light. This will bring upon the ſoul a ſort of *ſacred awe and dread of hearſay*; with a divine concern to maintain whatever opinion you have eſpouſed as divine, though perhaps you have eſpouſed it without any juſt evidence, and ought to have renounced it as falſe and pernicious.

WE ought to be zealous for the moſt important points of our religion, *and to contend earneſtly for the faith once delivered to the ſaints*; but we ought not to employ this ſacred fervour of ſpirit in the ſervice of any article, till we have ſeen it made out with plain and ſtrong conviction, that it is a neceſſary or important point of faith or practice, and is either an evident dictate of the light of nature, or an aſſured article of revelation. *Zeal* muſt not reign over the *powers of our underſtanding*, but obey them: God is the God of light and truth, a God of reaſon and order, and he never requires mankind to uſe their natural fa-

culties amiſs for the ſupport of his cauſe. Even the moſt myſterious and ſublime doctrines of revelation, are not to be believed without a juſt reaſon for it; nor ſhould our pious affections be engaged in the defence of them, till we have plain and convincing proof that they are certainly revealed, though perhaps we may never in this world attain to ſuch clear and diſtinct ideas of them as we deſire.

XVI. As a *warm zeal* ought never to be employed in the defence of any revealed truth, till our *reaſon* be well convinced of the *revelation*; ſo neither ſhould *wit and banter, jeſt and ridicule*, ever be indulged to oppoſe or aſſault any doctrines of profeſſed revelation, till *reaſon* has proved they are not really revealed. And even then, theſe methods ſhould be uſed very ſeldom, and with the utmoſt caution and prudence. *Raillery* and *wit* were never made to anſwer our enquiries after truth, and to determine a queſtion of rational controverſy; though they may ſometimes be ſerviceable, to expoſe to contempt thoſe inconſiſtent follies which have been firſt abundantly refuted by argument; they ſerve indeed only to cover *nonſenſe with ſhame*, when *reaſon* has firſt proved it to be *mere nonſenſe*.

IT is therefore a ſilly and moſt unreaſonable *teſt* which ſome of our *deiſts* have introduced to judge of divine revelation, viz.

viz. *to try if it will bear ridicule and laughter.* They are effectually beaten in all their combats at the *weapons of men*, that is, *reaſon and argument*; and it would not be unjuſt (though it is a little uncourtly) to ſay that they would now attack our religion with the *talents of a vile animal*, that is, *grin* and *grimace.*

I CANNOT think that a *jeſter* or a monkey, a *droll* or a puppet, can be proper judges or deciders of controverſy. That which dreſſes up all things in diſguiſe, is not likely to lead us into any juſt ſentiments about them. *Plato* or *Socrates*, *Cæſar* or *Alexander*, might have a fool's coat clapt upon any of them, and perhaps in this diſguiſe, neither the wiſdom of the one, nor the majeſty of the other, would ſecure them from a ſneer; this treatment would never inform us whether they were *kings* or *ſlaves*, whether they were *fools* or *philoſophers.* The ſtrongeſt reaſoning, the beſt ſenſe, and the politeſt thoughts, may be ſet in a moſt ridiculous light by this grinning faculty: the moſt obvious axioms of eternal truth may be dreſt in a very fooliſh form, and wrapt up in artful abſurdities by this talent; but they are truth and reaſon, and good ſenſe ſtill. *Euclid* with all his demonſtrations might be ſo covered and overwhelmed with banter, that a *beginner in the mathematics* might be tempted to doubt,

whether his theorems were true or no, and to imagine they could never be uſeful. So weaker minds might be eaſily prejudiced againſt the nobleſt principle of truth and goodneſs: and the younger part of mankind might be beat off from the belief of the moſt ſerious, the moſt rational and important points even of natural religion, by the impudent jeſts of a profane wit. The moral duties of the civil life, as well as the articles of *chriſtianity*, may be painted over with the colours of folly, and expoſed upon a ſtage, ſo as to ruin all ſocial and perſonal virtue among the gay and thoughtleſs part of the world.

XVII. IT ſhould be obſerved alſo, that theſe very men cry out loudly againſt the uſe of all ſevere *railing* and *reproach* in debates, and all *penalties* and *perſecutions* of the ſtate, in order to convince the minds and conſciences of men, and determine points of truth and error. Now I renounce theſe penal and ſmarting methods of conviction as much as they do, and yet I think ſtill theſe are every whit as wiſe, as juſt, and as good for this purpoſe, as *banter* and *ridicule*. Why ſhould *public mockery* in print, or a *merry joke* upon a ſtage, be a better teſt of truth, than ſevere *railing ſarcaſms* and *public perſecutions* and *penalties*? Why ſhould more light be derived to the underſtanding by a *ſong* of ſcurrilous mirth, or a witty

witty *ballad*, than there is by a rude *cudgel*? When a profeſſor of any religion is ſet up to be laughed at, I cannot ſee how this ſhould help us to judge of the truth of his faith, any better than if he were ſcourged. The *jeers* of a theatre, the *pillory* and the *whipping-poſt*, are very near a-kin. When the perſon or his opinion is made the jeſt of the mob, or his back the ſhambles of the executioner, I think there is no more conviction in the one than in the other.

XVIII. BESIDES, ſuppoſing it is but barely poſſible that the great God ſhould reveal his mind and will to men by miracle, viſion or inſpiration, it is a piece of *contempt* and *profane inſolence*, to treat any tolerable or rational appearance of ſuch a revelation with *jeſt* and *laughter*, in order to find whether it be divine or not. And yet if this be a *proper teſt of revelation*, it may be properly applied to the *true* as well as the *falſe*, in order to diſtinguiſh it. Suppoſe a *royal proclamation* were ſent to a diſtant part of the kingdom, and ſome of the ſubjects ſhould doubt whether it came from the king or no; is it poſſible that *wit* and *ridicule* ſhould ever decide the point? Or would the prince ever think himſelf treated with juſt honour, to have his proclamation canvaſſed in this manner on a public ſtage, and become the ſport of buffoons, in order

to determine the queſtion, *Whether it is the word of a king or no?*

LET ſuch ſort of writers go on at their deareſt peril, and *ſport themſelves in their own deceivings*; let them at their peril make a jeſt at the Bible, and treat the ſacred articles of *Chriſtianity* with ſcoff and merriment: but then let them lay aſide all their pretences to *reaſon* as well as *religion*; and as they expoſe themſelves by ſuch writings to the neglect and contempt of men, ſo let them prepare to meet the majeſty and indignation of God without timely repentance.

XIX. IN reading *philoſophical, moral* or *religious controverſies*, never raiſe your eſteem of any opinion by the aſſurance and zeal wherewith the author aſſerts it, nor by the higheſt praiſes he beſtows upon it: nor on the other hand, let your eſteem of an opinion be abated, nor your averſion to it raiſed by the ſupercilious contempt caſt upon it by a warm writer, nor by the ſovereign airs with which he condemns it. Let the force of argument alone influence your aſſent or diſſent. Take care that your ſoul be not warped or biaſſed on one ſide or the other, by any ſtrains of flattering or abuſive language; for there is no queſtion whatſoever, but hath ſome ſuch ſort of defenders and oppoſers. Leave thoſe writers to their own follies, who practiſe thus upon the

weakneſs of their readers without argument; leave them to triumph in their own fancied poſſeſſions and victories: it is oftentimes found that their poſſeſſions are but a heap of errors, and their boaſted victories are but overbearing noiſe and clamour, to ſilence the *voice* of truth.

IN *philoſophy* and *religion*, the *bigots* of all parties are generally the moſt poſitive, and deal much in this ſort of arguments. Sometimes theſe are the weapons of *pride*; for a haughty man ſuppoſes all his opinions to be infallible, and imagines the contrary ſentiments are ever ridiculous and not worthy of notice. Sometimes theſe ways of talking are the mere arms of ignorance: the men who uſe them know little of the oppoſite ſide of the queſtion, and therefore they exult in their own vain pretences to knowledge, as though no man of ſenſe could oppoſe their opinion. They rail at an objection againſt their own ſentiments, becauſe they can find no other anſwer to it but railing. And men of learning by their exceſſive vanity, have been ſometimes tempted into the ſame inſolent practice as well as the ignorant.

YET let it be remembered too, that there are ſome truths ſo plain and evident, that the oppoſition to them is ſtrange, unaccountable, and almoſt monſtrous: and in vindication of ſuch truths, a writer of good

good ſenſe may ſometimes be allowed to uſe a degree of aſſurance, and pronounce them ſtrongly with an air of confidence, while he defends them with reaſons of convincing force.

XX. SOMETIMES a *queſtion* may be propoſed, which is *of ſo large and extenſive a nature, and refers to ſuch a multitude of ſubjects, as ought not in juſtice to be determined at once by a ſingle argument or anſwer:* as if one ſhould aſk me, Are you a profeſſed diſciple of the *Stoics*, or the *Platoniſts?* Do you give an aſſent to the principles of *Gaſſendus*, *Deſcartes*, or Sir *Iſaac Newton?* Have you choſen the hypotheſis of *Tycho* or *Copernicus?* Have you devoted yourſelf to the ſentiments of *Arminius* or *Calvin?* Are your notions *epiſcopal*, *preſbyterian* or *independant?* &c. I think it may be very proper in ſuch caſes not to give an anſwer in the groſs, but rather to enter into a detail of particulars, and explain one's own ſentiments. Perhaps there is no man, nor ſet of men upon earth whoſe ſentiments I entirely follow. God has given me reaſon to judge for myſelf, and though I may ſee ſufficient ground to agree to the greateſt part of the opinions of one perſon or party, yet it does by no means follow that I ſhould receive them all. Truth does not always go by the lump, nor does error tincture and

ſpoil

ſpoil all the articles of belief that ſome one party profeſſes.

SINCE there are difficulties attend every ſcheme of human knowledge, it is enough for me in the main to incline to that ſide which has the feweſt difficulties; and I would endeavour, as far as poſſible, to correct the miſtakes or the harſh expreſſions of one party, by ſoftening and reconciling methods, by reducing the extremes, and by borrowing ſome of the beſt principles or phraſes from another. *Cicero* was one of the greateſt men of antiquity, and gives us an account of the various opinions of philoſophers in his age; but he himſelf was of the *Eclectic* ſect, and choſe out of each of them ſuch poſitions, as in his wiſeſt judgment came neareſt to the truth.

XXI WHEN you are called in the courſe of life or religion to judge and determine concerning any queſtion, and to affirm or deny it, *take a full ſurvey of the objection againſt it, as well as of the arguments for it, as far as your time and circumſtances admit, and ſee on which ſide the preponderation falls.* If either the *objections* againſt any propoſition, or the *arguments* for the defence of it, carry in them moſt undoubted evidence, and are plainly unanſwerable, they will and ought to conſtrain the aſſent, though there may be many ſeeming probabilities on the other ſide, which

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at firſt ſight would flatter the judgment to favour it. But where the reaſons on both ſides are very near of equal weight, there *ſuſpenſion* or *doubt* is our duty, unleſs in caſes wherein preſent determination or practice is required, and there we muſt act according to the preſent appearing preponderation of reaſons.

XXII. *IN matters of moment and importance, it is our duty indeed to ſeek after certain and concluſive arguments,* (if they can be found) in order to determine a queſtion: but where the matter is of little conſequence, it is not worth our labour to ſpend much time in ſeeking after *certainties*; it is ſufficient here, if *probable reaſons* offer themſelves. And even in matters of greater importance, eſpecially where daily practice is neceſſary, and where we cannot attain any *ſufficient* or *certain grounds* to determine a queſtion on either ſide, we muſt then take up with ſuch *probable arguments* as we can arrive at. But this general rule ſhould be obſerved, *viz.* to take heed that our aſſent be no ſtronger, or riſe no higher in the degree of it, than the *probable argument* will ſupport.

XXIII. THERE are many things even in *religion*, as well as in *philoſophy* and the *civil life*, which we believe with very *different degrees of aſſent*; and this is, or ſhould be always regulated according to the different

rent degrees of evidence which we enjoy: and perhaps there are a thouſand gradations in our aſſent to the things we believe, becauſe there are thouſands of circumſtances relating to different queſtions, which increaſe or diminiſh the evidence we have concerning them, and that in matters both of reaſon and revelation.

I believe there is a God, and that *obedience is due to him from every reaſonable creature:* this I am moſt fully aſſured of, becauſe I have the ſtrongeſt evidence, ſince it is the plain dictate both of reaſon and revelation.

AGAIN. *I believe there is a future reſurrection of the dead,* becauſe ſcripture tells us ſo in the plaineſt terms, though reaſon ſays nothing of it. *I believe alſo, that the ſame matter of our bodies which died* (in part at leaſt) *ſhall ariſe*; but I am not ſo fully aſſured of this circumſtance, becauſe the revelation of it is not quite ſo clear and expreſs. Yet further, *I believe that the good men who were acquainted here on earth, ſhall know each other in heaven*; but my perſuaſion of it is not abſolutely certain, becauſe my aſſent to it ariſes only from circumſtantial reaſonings of men upon what God has told us, and therefore my evidences are not ſtrong beyond a poſſibility of miſtake. This direction cannot be too often repeated, that *our aſſent ought always*

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to keep pace with our evidence; and our belief of any propoſition, ſhould never riſe higher than the proof or evidence we have to ſupport it, nor ſhould our faith run faſter than right reaſon can encourage it.

XXIV. PERHAPS it will be *objected* here, *why then does our Saviour in the hiſtories of the goſpel, ſo much commend a ſtrong faith*; and *lay out both his miraculous benefits and his praiſes upon ſome of thoſe poor creatures of little reaſoning, who profeſt an aſſured belief of his commiſſion and power to heal them?*

I *anſwer*, The God of nature has given every man *his own reaſon* to be the judge of evidence to himſelf in particular, and to direct his aſſent in all things about which he is called to judge; and even the matters of revelation are to believed by us, becauſe our reaſon pronounces the revelation to be true. Therefore the great God will not, or cannot, in any inſtances, require us to aſſent to any thing without reaſonable or ſufficient evidence; nor to believe any propoſition more ſtrongly, than what our evidence for it will ſupport. We have therefore abundant ground to believe, that thoſe perſons of whom our Saviour requires ſuch a *ſtrong faith*, or whom he commends for their ſtrong faith, had as ſtrong and certain evidence of his power and commiſſion, from the credible and inconteſtable reports they had heard of his miracles, which

which were wrought on purpoſe to give evidence to his commiſſion*. Now in ſuch a caſe, both this ſtrong faith and the open profeſſion of it were very worthy of public encouragement and praiſe from our Saviour, becauſe of the great and public oppoſition which the magiſtrates and the prieſts, and the doctors of the age made againſt *Jeſus* the man of *Nazareth*, when he appeared as the *Meſſiah*.

AND beſides all this it may be reaſonably ſuppoſed, with regard to ſome of thoſe ſtrong exerciſes of faith which are required and commended, that theſe believers had ſome further hints of inward evidence and immediate revelation from God himſelf; as when St. *Peter* confeſſes *Chriſt* to be the *Son of God*, Matt. xvi. 16, 47. our bleſſed Saviour commends him, ſaying, *bleſſed art thou, Simon Bar-jona*; but he adds, *fleſh and blood hath not revealed it unto thee, but my Father who is in heaven.*

* When our Saviour gently reproves *Thomas* for his unbelief, *John* xx. 29. he does it in theſe words, *Becauſe thou haſt ſeen me*, Thomas, *thou haſt believed: bleſſed are they who have not ſeen, and yet have believed*, i. e. bleſſed are they who, though they have not been favoured with the evidence of their ſenſes as thou haſt been, yet have been convinced by the reaſonable and ſufficient moral evidence of the well grounded report of others, and have believed in me upon that evidence. Of this *moral evidence* Mr. *Ditton* writes exceedingly well, in his book of the *Reſurrection of Chriſt*.

AND the ſame may be ſaid concerning the *faith of miracles*, the exerciſe whereof was ſometimes required of the diſciples and others, *i. e.* when by inward and divine influences God aſſured them ſuch miracles ſhould be wrought, their obedience to and compliance with theſe divine illuminations was expected and commended. Now this ſupernatural inſpiration, carried ſufficient *evidence* with it to them, as well as to the antient prophets, though we who never felt it are not ſo capable to judge and diſtinguiſh it.

XXV. WHAT is ſaid before concerning *truth* or *doctrines*, may be alſo affirmed concerning *duties*; the reaſon of both is the ſame; as the one are *truths for our ſpeculation*, the others are *truths for our practice*. *Duties* which are expreſsly required in the plain language of ſcripture, or dictated by the moſt evident reaſoning upon firſt principles, ought to bind our conſciences more than thoſe which are but dubiouſly inferred, and that only from occaſional occurrences, incidents and circumſtances: as for inſtance, I am certain that *I ought to pray to God*; my conſcience is bound to this, becauſe there are moſt evident commands for it to be found in ſcripture, as well as to be derived from reaſon. I believe alſo that I may *pray to God, either by a written form*, or *without one*, becauſe neither reaſon nor revelation expreſsly requires either of theſe modes of

of prayer at all times, or forbids the other. I cannot therefore bind my conſcience to practiſe the one, ſo as utterly to renounce the other; but I would practiſe either of them, as my reaſon and other circumſtances direct me.

AGAIN, I believe *that Chriſtians ought to remember the death of* Chriſt *by the ſymbols of bread and wine*; and I believe *there ought to be paſtors in a Chriſtian church, ſome way ordained or ſet apart to lead the worſhip, and to bleſs and diſtribute the elements*; but the laſt of theſe practices is not ſo expreſsly directed, preſcribed, and required in ſcripture as the former; and therefore I feel my conſcience evidently bound *to remember the death of Chriſt* with ſome ſociety of Chriſtians or other, ſince it is a moſt plain command, though their methods of ordaining a paſtor be very different from other men, or from my own opinion; or whether the perſon who diſtributes theſe elements, be only an occaſional or a ſettled adminiſtrator; ſince none of theſe things are plainly determined in ſcripture. I muſt not omit or neglect an expreſs command, becauſe ſome unneceſſary circumſtances are dubious. And I truſt I ſhall receive approbation from the God of nature, and from *Jeſus* my judge at the laſt day, if I have endeavoured in this manner to believe and practiſe every thing in proportion to the degree of evidence

which [illegible]as given me about it, or which he has put me into a capacity to ſeek and obtain in the age and nation wherein I live.

Query, WHETHER the obſtinate *Deiſts* and the *Fataliſts* of *Great-Britain*, will find ſufficient apology from this principle? But I leave them to venture the awful experiment.

XXVI. WE may obſerve theſe *three rules, in judging of probabilities* which are to be determined by reaſon, relating either to things paſt, or things to come.

1. THAT which *agrees moſt with the conſtitution of nature* carries the greateſt probability in it, where no other circumſtance appears to counterpoiſe it: as, if I let looſe a greyhound within ſight of a hare upon a large plain, there is great probability the greyhound will ſeize her; that a thouſand ſparrows will fly away at the ſight of a hawk among them.

2. THAT which is *moſt conformable to the conſtant obſervations of men*, or to *experiments frequently repeated*, is moſt likely to be true: as, that a winter will not paſs away in *England* without ſome froſt and ſnow; that if you deal out great quantities of ſtrong liquor to the mob, there will be many drunk; that a large aſſembly of men will be of different opinions in any doubtful point; that a thief will make his eſcape out of priſon, if the doors of it are unguarded at midnight.

3. IN matters of fact which are paſt or preſent, where neither nature, nor obſervation, nor cuſtom gives us any ſufficient information on either ſide of the queſtion, there we may derive a probability *from the atteſtation of wiſe and honeſt men* by word or writing, or the *concurring witneſſes of multitudes* who have ſeen and known what they relate, *&c.* This *teſtimony* in many caſes will ariſe to the degree of *moral certainty*. So we believe that the plant *tea* grows in *China*; and that the emperor of the *Turks* lives at *Conſtantinople*; that *Julius Cæſar* conquered *France*, and that *Jeſus* our Saviour lived and died in *Judæa*; that thouſands were converted to the *Chriſtian faith* in a century after the death of *Chriſt*; and that the *books* which contain the *Chriſtian religion*, are certain hiſtories and epiſtles which were written about a thouſand years ago. There is an infinite variety of ſuch propoſitions which can admit of no reaſonable doubt, though they are not matters which are directly evident to our own ſenſes, or our mere reaſoning powers.

XXVII. WHEN a point hath been well examined, and our own judgment ſettled upon juſt arguments in our manly age, and after a large ſurvey of the merits of the cauſe, it would be a *weakneſs for us always to continue fluttering in ſuſpenſe*. We ought therefore to ſtand firm in ſuch well eſta-

bliſhed principles, and not be tempted to change and alter for the ſake of every difficulty, or every occaſional objection. We are *not to be carried about with every* flying *doctrine, like children toſſed to and fro, and wavering with the wind. It is a good thing to have the heart eſtabliſhed with grace, not with meats*; that is, in the great doctrines of the goſpel of *grace* and in *Jeſus Chriſt*, who *is the ſame yeſterday, to-day and for ever*; but it is not ſo neceſſary in the more minute matters of religion, ſuch as *meats* and *drinks*, *forms* and *ceremonies*, which are of leſs importance, and for which ſcripture has not given ſuch expreſs directions. This is the advice of the great apoſtle, *Eph.* iv. 14. *Heb.* xiii. 8, 9.

IN ſhort, thoſe truths which are the ſprings of daily practice, ſhould be ſettled as ſoon as we can with the exerciſe of our beſt *powers*, after the ſtate of manhood: but thoſe things wherein we may poſſibly miſtake, ſhould never be ſo abſolutely and finally eſtabliſhed and determined, as though we were infallible. If the *Papiſts* of *Great-Britain* had maintained ſuch a reſolute eſtabliſhment and aſſurance in the days of king *Henry* the VIIIth or queen *Elizabeth*, there never had been a reformation: nor would any *Heathen* have been converted even under the miniſtry of St. *Paul*, if their obſtinate ſettlement in their idolatries had kept

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their eyes ſhut againſt all further light. Yet this ſhould not hinder us from ſettling our moſt important principles of faith and practice, where reaſon ſhines with its cleareſt evidence, and the word of God plainly determines truth and duty.

XXVII. BUT let us remember alſo, that though the goſpel be an *infallible revelation*, we are but *fallible interpreters*, when we determine the ſenſe even of ſome important propoſitions written there; and therefore though we ſeem to be eſtabliſhed in the belief of any particular ſenſe of ſcripture, and though there may be juſt calls of providence to profeſs and ſubſcribe it, yet there is no need that we ſhould reſolve or promiſe, ſubſcribe or ſwear never to change our mind; ſince it is poſſible in the nature and courſe of things, we may meet with ſuch a ſolid and ſubſtantial objection, as may give us a quite different view of things from what we once imagined, and may lay before us ſufficient evidence of the contrary. We may happen to find a fairer light caſt over the ſame ſcriptures, and ſee reaſon to alter our ſentiments even in ſome points of moment. *Sic ſentio, ſic ſentiam*, i. e. *ſo I believe, and ſo I will believe*, is the priſon of the ſoul for life time, and a bar againſt all the improvements of the mind. To impoſe ſuch a profeſſion on other men in matters not abſolutely neceſſary and not

abſolutely certain, is a criminal uſurpation and tyranny over faith and conſcience, and which none has power to require but an infallible dictator.

CHAP. XIX.

Of enquiring into CAUSES *and* EFFECTS.

SOME effects are found out by their cauſes, and ſome cauſes by their effects. Let us conſider both theſe.

I. *WHEN we are enquiring into the cauſes of any particular effect* or *appearance*, either in the world of nature, or in the civil or moral concerns of men, we may follow this method.

1. CONSIDER what effects or appearances you have known of a *kindred nature*, and what have been the *certain* and *real cauſes* of them; for *like effects* have generally *like cauſes*, eſpecially when they are found in the *ſame* ſort of *ſubjects*.

2. CONSIDER what are the ſeveral *poſſible cauſes* which may produce ſuch an effect: and find out by ſome circumſtances, how many of thoſe poſſible cauſes are excluded

cluded in this particular caſe: thence proceed by degrees to the *probable cauſes*, till a more cloſe attention and inſpection ſhall exclude ſome of them alſo, and lead you gradually to the *real* and *certain cauſe*.

3. CONSIDER what *things preceded* ſuch an event or appearance, which might have any influence upon it; and though we cannot certainly determine the cauſe of any thing only from its going before the effect, yet among the many *forerunners*, we may probably light upon the true cauſe, by further and more particular enquiry.

4. CONSIDER whether *one cauſe* be ſufficient to produce the effect, or whether it does not require a *concurrence of ſeveral cauſes*; and then endeavour as far as poſſible, to adjuſt the degrees of influence that each cauſe might have in producing the effect, and the proper agency and influence of each of them therein.

So in *natural philoſophy*, if I would find what are the principles or cauſes of that ſenſation which we call *heat* when I ſtand near the fire; here I ſhall find it is neceſſary that there be an agency of the particles of fire on my fleſh, either mediately by themſelves, or at leaſt by the intermediate air; there muſt be a particular ſort of motion and vellication impreſt upon my nerves; there muſt be a derivation of that motion to the brain; and there muſt be an

attention of my ſoul to this motion: if either of theſe are wanting, the ſenſation of *heat* will not be produced.

So in the *moral world*, if I enquire into the *revolution of a ſtate or kingdom*, perhaps I find it brought about by the tyranny or folly of a prince, or by the diſaffection of his own ſubjects; and this diſaffection and oppoſition may ariſe, either upon the account of impoſitions in religion, or injuries relating to their civil rights: or the revolution may be effected by the invaſion of a foreign army, or by the oppoſition of ſome perſon at home or abroad that lays claim to the government, *&c.* or a hero who would guard the liberties of the people; or by many of theſe concurring together; then we muſt adjuſt the influences of each as wiſely as we can, and not aſcribe the whole event to one of them alone.

II. *WHEN we are enquiring into the effects of any particular cauſe* or *cauſes*, we may follow this method.

1. CONSIDER diligently the *nature of every cauſe* apart, and obſerve what effect every part or property of it will tend to produce.

2. CONSIDER the *cauſes united together* in their ſeveral natures, and ways of operation; enquire how far the powers or properties of one, will hinder or promote the effects of the other, and wiſely balance the proportions of the influence.

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3. CONSIDER what the *ſubject* is, in or upon which the cauſe is to operate: for the ſame cauſe on different ſubjects will oftentimes produce different effects, as the *ſun* which ſoftens *wax* will harden *clay*.

4. BE frequent and diligent in *making all proper experiments*; in ſetting ſuch cauſes at work whoſe effects you deſire to know, and putting together in an orderly manner, ſuch things as are moſt likely to produce ſome uſeful effects, according to the beſt ſurvey you can take of all the concurring cauſes and circumſtances.

5. *OBSERVE* carefully all the *events* which happen either by an occaſional concurrence of various cauſes, or by the induſtrious application of knowing men: and when you ſee any happy effect certainly produced, and often repeated, treaſure it up together with the known cauſes of it, amongſt your improvements.

6. TAKE a juſt ſurvey of all *the circumſtances* which attend the operation of any cauſe or cauſes, whereby any ſpecial effect is produced, and find out as far as poſſible, how far any of thoſe circumſtances had a tendency either to obſtruct or promote, or change thoſe operations, and conſequently how far the effect might be influenced by them.

IN this manner, *phyſicians* practiſe and improve their ſkill. They conſider the various

ous known effects of *particular herbs or drugs*, they meditate what will be the effect of their *compoſition*, and whether the virtues of the one will exalt or diminiſh the force of the other, or correct any of its nocent qualities. Then they obſerve the native conſtitution, and the preſent temper or circumſtances of the patient, and what is likely to be the effect of ſuch a medicine on ſuch a patient. And in all uncommon caſes they make wiſe and cautious experiments, and nicely obſerve the effects of particular compound medicines on different conſtitutions, and in different diſeaſes; and by theſe treaſuries of juſt obſervations, they grow up to an honourable degree of ſkill in the *art of healing*.

So the *preacher* conſiders the *doctrines* and *reaſons*, the *precepts*, the *promiſes*, and *threatenings* of the word of God, and what are the natural effects of them upon the mind; he conſiders what is the *natural tendency of ſuch a virtue or ſuch a vice*; he is well apprized that the repreſentation of ſome of theſe things may convince the underſtanding, ſome may terrify the conſcience, ſome may allure the ſlothful, and ſome encourage the deſponding mind: he obſerves the *temper of his hearers*, or of any particular perſon that converſes with him about things ſacred, and he judges what will be the effects of each repreſentation

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on ſuch perſons; he reviews and recollects what have been the effects of ſome ſpecial parts and methods of his miniſtry; and by a careful ſurvey of all theſe, he attains greater degrees of ſkill in his ſacred employment.

Note, IN all theſe caſes, we muſt diſtinguiſh thoſe cauſes and effects which are *naturally* and *neceſſarily connected* with each other, from thoſe which have only an *accidental or contingent connection*. Even in thoſe cauſes where the effect is but *contingent*, we may ſometimes arrive at a very high degree of probability; yet we cannot arrive at ſuch certainty as where the cauſes operate by an *evident* and *natural neceſſity*, and the effects neceſſarily follow the operation.

See more on this ſubject, *logic*, Part II. Chap. V. Sect. 7. *Of the Principles and Rules of judging concerning things paſt, preſent and to come, by the mere uſe of reaſon.*

CHAP.

CHAP. XX.

Of the Sciences, and their uſe in particular profeſſions.

I. THE *beſt way to learn any ſcience, is to begin with a regular ſyſtem,* or a ſhort and plain ſcheme of that ſcience, well drawn up into a narrow compaſs, omitting the deeper and more abſtruſe parts of it, and that alſo under the conduct and inſtruction of ſome ſkilful teacher. Syſtems are neceſſary to give an entire and comprehenſive view of the ſeveral parts of any ſcience, which may have a mutual influence toward the explication or proof of each other: whereas if a man deals always and only in *eſſays* and *diſcourſes* on particular parts of a ſcience, he will never obtain a diſtinct and juſt idea of the whole, and may perhaps omit ſome important part of it after ſeven years reading of ſuch occaſional diſcourſes.

FOR this reaſon, young ſtudents ſhould apply themſelves to their *ſyſtems* much more than *pamphlets*. That man is never ſo fit to judge of *particular ſubjects* relating to any ſcience, who has never taken a ſurvey of the *whole*.

IT is the remark of an ingenious writer, ſhould a barbarous *Indian*, who had never ſeen a *palace* or a *ſhip*, view their ſeparate and disjointed parts, and obſerve the pillars, doors, windows, cornices and turrets of the *one*, or the prow and ſtern, the ribs and maſts, the ropes and ſhrouds, the ſails and tackle of the *other*, he would be able to form but a very lame and dark idea of either of thoſe excellent and uſeful inventions. In like manner, thoſe who contemplate only the fragments or pieces broken off from any ſcience diſperſed in ſhort unconnected diſcourſes, and do not diſcern their relation to each other, and how they may be adapted, and by their union procure the delightful ſymmetry of a regular ſcheme, can never ſurvey an entire body of truth, but muſt always view it as deformed and diſmembered; while their ideas, which muſt be ever indiſtinct and often repugnant, will lie in the brain unſorted, and thrown together without order or coherence: ſuch is the knowledge of thoſe men who live upon the ſcraps of the ſciences.

A YOUTH of genius and lively imagination, of an active and forward ſpirit, may form within himſelf ſome alluring ſcenes and pleaſing ſchemes in the beginning of a ſcience, which are utterly inconſiſtent with ſome of the neceſſary and ſubſtantial parts of it which appear in the middle or the end.

end. And if he never read and paſs through the whole, he takes up and is ſatisfied with his own haſty pleaſing ſchemes, and treaſures theſe errors up amongſt his ſolid acquiſitions; whereas his own labour and ſtudy farther purſued would have ſhewn him his early miſtakes, and cured him of his ſelf-flattering deluſions.

HENCE it comes to paſs, that we have ſo many *half-ſcholars* now-a-days, and there is ſo much confuſion and inconſiſtency in the notions and opinions of ſome perſons, becauſe they devote their hours of ſtudy entirely to ſhort *eſſays* and *pamphlets*, and caſt contempt upon *ſyſtems* under a pretence of greater politeneſs; whereas the true reaſon of this contempt of ſyſtematical learning, is mere lazineſs and want of judgment.

II. AFTER we are grown well acquainted with a *ſhort ſyſtem* or *compendium* of a ſcience which is written in the plaineſt and moſt ſimple manner, *it is then proper to read a larger regular treatiſe on that ſubject*, if we deſign a complete knowledge and cultivation of it: and either while we are reading this *larger ſyſtem*, or after we have done it, then *occaſional diſcourſes* and *eſſays* upon the particular ſubjects and parts of that ſcience may be read with the greateſt profit: for in theſe *eſſays* we may often find very conſiderable corrections and improvements of

of what theſe *compends*, or even the *larger ſyſtems* may have taught us, mingled with ſome miſtakes.

AND theſe corrections or improvements ſhould be as remarks, adjoining by way of note or commentary in their proper places, and ſuperadded to the regular treatiſe we have read. Then a ſtudious and judicious review of the whole, will give us a tolerable acquaintance with that ſcience.

III. *IT is a great happineſs to have ſuch a tutor, or ſuch friends and companions at hand*, who are able to inform us what are the beſt books written on any ſcience, or any ſpecial part of it. For want of this advantage, many a man has waſted his time in reading over perhaps ſome whole volumes, and learnt little more by it than to know, that thoſe volumes were not worth his reading.

IV. As for the *languages, they are certainly beſt learned in the younger years of life.* The memory is then moſt empty and unfurniſhed, and ready to receive new ideas continually. We find that children in two years time after they are born, learn to ſpeak their native tongue.

V. *The more abſtracted ſciences*, which depend more upon the underſtanding and judgment, and which deal much in abſtracted ideas, *ſhould not be impoſed upon children too ſoon*; ſuch are *logic*, *metaphyſics*, *ethics*, *politics*,

politics, or the depths and difficulties of *grammar* and *criticiſm*. Yet it muſt be confeſſed, the firſt rudiments of *grammar* are neceſſary, or at leaſt very convenient to be known when a youth learns a new language; and ſome general eaſy principles and rules of morality and divinity are needful, in order to teach a child his duty to God and man; but to enter far into abſtracted reaſonings on theſe ſubjects, is beyond the capacity of children.

VI THERE are *ſeveral of the ſciences, that will more agreeably employ our younger years*, and the general parts of them may be eaſily taken in by boys. The firſt principles and eaſier practices of *arithmetic, geometry, plain trigonometry, meaſuring heights, depths, lengths, diſtances*, &c. The rudiments of *geometry* and *aſtronomy*, together with ſomething of *mechanics*, may be eaſily conveyed into the minds of acute young perſons from nine or ten years old and upward. Theſe ſtudies may be entertaining and uſeful to young ladies as well as to gentlemen, and to all thoſe who are bred up to the learned profeſſions. The *fair ſex* may intermingle thoſe with the operations of the needle, and the knowledge of domeſtic life. *Boys* may be taught to join them with their rudiments of *grammar*, and their labour in the languages. And even thoſe who never learn any language but

but their mother-tongue may be taught theſe ſciences with laſting benefit in early days.

THAT this may be done with eaſe and advantage take theſe three reaſons.

(1.) BECAUSE they depend ſo much upon ſchemes and numbers, images, lines and figures, and ſenſible things, that the imagination or fancy will greatly aſſiſt the underſtanding, and render the knowledge of them much more eaſy.

(2.) THESE ſtudies are ſo pleaſant, that they will make the dry labour of learning words, phraſes and languages more tolerable to boys in a *Latin* ſchool by this moſt agreeable mixture. The employment of youth in theſe ſtudies will tempt them to neglect many of the fooliſh plays of childhood, and they will find ſweeter entertainment for themſelves and their leiſure hours by a cultivation of theſe pretty pieces of alluring knowledge.

(3.) THE knowledge of theſe parts of ſcience are both eaſy and worthy to be retained in memory by all children when they come to manly years, for they are uſeful through all the parts of human life: they tend to enlarge the underſtanding early, and to give a various acquaintance with uſeful ſubjects betimes. And ſurely it is beſt, as far as poſſible, to train up children in the knowledge of thoſe things which they ſhould

never forget, rather than to let them waſte years of life in trifles, or in hard words which are not worth remembering.

AND here by the way I cannot but wonder, that any author in our age ſhould have attempted to teach any of the exploded *phyſics* of *Deſcartes*, or the nobler inventions of Sir *Iſaac Newton*, in his hypotheſis of the heavenly bodies and their motions, in his doctrine of light and colours, and other parts of his *phyſiology*, or to inſtruct children in the knowledge of the theory of the heavens, earth and planets, without any *figures* or *diagrams*. Is it poſſible to give a boy or a young lady the clear, diſtinct and proper apprehenſions of theſe things without lines and figures to deſcribe them? Does not their underſtanding want the aid of fancy and images to convey ſtronger and juſter ideas of them to the inmoſt ſoul: or do they imagine that youth can penetrate into all theſe beauties and artifices of nature without theſe helps, which perſons of maturer age find neceſſary for that purpoſe? I would not willingly name the books, becauſe ſome of the writers are ſaid to be gentlemen of excellent acquirements.

VII. AFTER we have firſt learnt and gone through any of thoſe arts or ſciences which are to be explained by diagrams, figures and ſchemes, ſuch as *geometry*, *geography*,

geography, *aſtronomy*, *optics*, *mechanics*, &c. we may beſt *preſerve them in memory by having thoſe ſchemes* and *figures* in large ſheets of paper *hanging always before the eye* in cloſets, parlours, halls, chambers, entries, ſtair-caſes, *&c.* Thus the learned images will be perpetually impreſt on the brain, and will keep the learning that depends upon them alive and freſh in the mind through the growing years of life: the mere diagrams and figures will ever recal to our thoughts thoſe theorems, problems, and corollaries, which have been demonſtrated by them.

IT is incredible how much *geography* may be learnt this way by the two terreſtrial hemiſpheres, and by particular maps and charts of the *coaſts* and *countries* of the earth happily diſpoſed round about us. Thus we may learn alſo the *conſtellations* by juſt projections of the celeſtial ſphere, hung up in the ſame manner. And I muſt confeſs, for the bulk of learners of *aſtronomy*, I like that projection of the ſtars beſt, which includes in it all the ſtars in our horizon, and therefore it reaches to the $38\frac{1}{2}$ degree of *ſouthern latitude*, though its center is the *north-pole*. This gives us a better view of the heavenly bodies as they appear every night to us, and it may be made uſe of with a little inſtruction, and with eaſe, to ſerve for a

nocturnal, and ſhew the true hour of the night.

BUT remember, that if there be any colouring upon theſe maps or projections, it ſhould be laid on ſo thin, as not to obſcure or conceal any part of the lines, figures or letters: whereas moſt times they are daubed ſo thick with gay and glaring colours, and hung up ſo high above the reach of the eye that ſhould ſurvey and read them, as though their only deſign were to make a gaudy ſhow upon the wall, and they hung there merely to cover the naked plaiſter or wainſcot.

THOSE ſciences which may be drawn out into tables may alſo be thus hung up and diſpoſed in proper places, ſuch as, *brief abſtracts of hiſtory*, *chronology*, &c. and indeed, the ſchemes of any of the arts or ſciences may be analyſed in a ſort of *ſkeleton*, and repreſented upon tables, with the various dependencies and connections of their ſeveral parts and ſubjects that belong to them. Mr. *Solomon Lowe* has happily thrown the *grammar* of ſeveral languages into ſuch tables; and a frequent review of theſe *abſtracts* and *epitomes* would tend much to imprint them on the brain, when they have been once well learned; this would keep thoſe learned traces always open, and aſſiſt the weakneſs of a labouring memory. In this manner may a ſcheme of

of the *ſcripture hiſtory* be drawn out, and perpetuate thoſe ideas in the mind with which our daily reading furniſhes us.

VIII. EVERY man who pretends to the character of a *ſcholar*, ſhould attain *ſome general and ſuperficial idea of moſt or all the ſciences:* for there is a certain connection among the various parts of human knowledge, ſo that ſome notions borrowed from any one ſcience may aſſiſt our acquaintance with any other, either by way of *explication*, *illuſtration* or *proof:* though there are ſome ſciences conjoined by a much nearer affinity than others.

IX. *LET thoſe parts of every ſcience* be chiefly ſtudied at firſt, and reviewed afterwards, *which have a more direct tendency to aſſiſt our proper profeſſion, as men*, or *our general profeſſion as chriſtians*, always obſerving what we ourſelves have found moſt neceſſary and uſeful to us in the courſe of our lives. Age and experience will teach us to judge which of the ſciences, and which parts of them, have been of greateſt uſe, and are moſt valuable; but in younger years of life we are not ſufficient judges of this matter, and therefore ſhould ſeek advice from others who are elder.

X. THERE are three learned profeſſions among us, *viz. divinity*, *law*, and *medicine*. Though every man who pretends to be a ſcholar or a gentleman ſhould ſo far ac-

quaint himſelf with a ſuperficial ſcheme of all the ſciences, as not to ſtand amazed like a mere ſtranger at the mention of the common ſubjects that belong to them; yet there is no neceſſity for every man of learning to enter into their difficulties and deep receſſes, nor to climb the heights to which ſome others have arrived. The knowledge of them in a proper meaſure may be happily uſeful to every profeſſion, not only becauſe all arts and ſciences have a ſort of communion and connection with each other, but it is an angelic pleaſure to grow in knowledge, it is a matter of honour and eſteem, and renders a man more agreeable and acceptable in every company.

BUT let us ſurvey ſeveral of them more particularly, with regard to the learned profeſſions: and firſt of the *mathematics*.

XI. THOUGH I have ſo often commended *mathematical ſtudies*, and particularly the ſpeculations of *arithmetic* and *geometry*, as a means to fix a wavering mind, to beget an habit of attention, and to improve the faculty of reaſon; yet I would by no means be underſtood to recommend to all a purſuit of theſe ſciences, to thoſe extenſive lengths to which the moderns have advanced them. This is neither neceſſary nor proper for any ſtudents, but thoſe few who ſhall make theſe ſtudies their chief profeſſion and buſineſs of life, or thoſe gentlemen

men whoſe capacities and turn of mind are ſuited to theſe ſtudies, and have all manner of advantage to improve in them.

THE general principles of *arithmetic*, *algebra*, *geometry and trigonometry*, of *geography*, of modern *aſtronomy*, *mechanics*, *ſtatics* and *optics*, have their valuable and excellent uſes, not only for the exerciſe and improvement of the faculties of the mind, but the ſubjects themſelves are very well worth our knowledge in a moderate degree, and are often made of admirable ſervice in human life. So much of theſe ſubjects as Dr. *Wells* has given us in his three volumes, entitled, *The Young Gentleman's Mathematics*, is richly ſufficient for the greateſt part of ſcholars or gentlemen; though perhaps there may be ſome ſingle treatiſes, at leaſt on ſome of theſe ſubjects, which may be better written and more uſeful to be peruſed than thoſe of that learned author.

BUT a penetration into the abſtruſe difficulties and depths of modern *algebra* and *fluxions*, the various *methods of quadratures*, the *menſuration* of all manner of *curves*, and their mutual *transformation*, and twenty other things that ſome modern *mathematicians deal in*, are not worth the labour of thoſe who deſign either of the three learned profeſſions, *divinity*, *law*, or *phyſic*, as the buſineſs of life. This is

the ſentence of a conſiderable man, *viz.* Dr. *George Cheyne*, who was a very good proficient and writer on theſe ſubjects: he affirms, that they are but barren and airy ſtudies for a man entirely to live upon, and that for a man to indulge and riot in theſe exquiſitely bewitching contemplations, is only proper for public profeſſors, or for gentlemen of eſtates, who have a ſtrong propenſity this way, and a genius fit to cultivate them.

BUT, ſays he, to own a great but grievous truth, though they may quicken and ſharpen the invention, ſtrengthen and extend the imagination, improve and refine the reaſoning faculty, and are of uſe both in the neceſſary and the luxurious refinement of *mechanical* arts; yet having no tendency to rectify the will, to ſweeten the temper, or mend the heart, they often leave a ſtiffneſs, a poſitiveneſs and ſufficiency on weak minds, which is much more pernicious to ſociety, and to the intereſts of the great end of our being, than all their advantages can recompenſe. He adds further concerning the launching into the depth of the ſtudies, that they are apt to beget a ſecret and refined pride, and over-weening and over-bearing vanity, the moſt oppoſite temper to the true ſpirit of the goſpel. This tempts them to preſume on a kind of omniſcience in reſpect to their fellow-creatures,

creatures, who have not riſen to their elevation; nor are they fit to be truſted in the hands of any but thoſe who have acquired a humble heart, a lowly ſpirit, and a ſober and teachable temper. See Dr. *Cheyne*'s preface to his *Eſſay on Health and long Life*.

XII. SOME of the practical parts of *geometry*, *aſtronomy*, *dialling*, *optics*, *ſtatics*, *mechanics*, &c. may be agreeable entertainments and amuſements to ſtudents in every profeſſion at leiſure hours, if they enjoy ſuch circumſtances of life as to furniſh them with conveniencies for this ſort of improvement: but let them take great care, leſt they entrench upon more neceſſary employments, and ſo fall under the charge and cenſure of waſted time.

YET I cannot help making this obſervation, that where ſtudents, or indeed any young gentlemen, have in their early years made themſelves maſters of a variety of elegant problems in the *mathematic* circle of knowledge, and gained the moſt eaſy, neat, and entertaining experiments in *natural philoſophy*, with ſome ſhort and agreeable ſpeculations or practices in any *other of the arts or ſciences*, they have hereby laid a foundation for the eſteem and love of mankind among thoſe with whom they converſe, in higher or lower ranks of life; they have been often guarded by this means from the temptation of innocent pleaſures,

and

and have ſecured both their own hours and the hours of their companions, from running to waſte in ſauntering and trifles, and from a thouſand impertinences in ſilly dialogues. Gaming and drinking, and many criminal and fooliſh ſcenes of talk and action, have been prevented by theſe innocent and improving elegancies of knowledge.

XIII. HISTORY is a neceſſary ſtudy in the ſupreme place for gentlemen who deal in *politics*. The government of nations, and diſtreſsful and deſolating events which have in all ages attended the miſtakes of politicians, ſhould be ever preſent on their minds, to warn them to avoid the like conduct. *Geography* and *chronology*, which preciſely informs us of the *place* and *time* where ſuch tranſactions or events happened, are the eyes of *hiſtory*, and of abſolute neceſſity in ſome meaſure to attend it.

BUT *hiſtory*, ſo far as relates to the affairs of the Bible, is as neceſſary to divines as to gentlemen of any profeſſion. It helps us to reconcile many difficulties in ſcripture, and demonſtrates a divine providence. Dr. *Prideaux*'s *Connection of the Old and New Teſtament*, is an excellent treatiſe of this kind.

XIV. AMONG the ſmaller hiſtories, *biography*, or the memoirs of the lives of great and good men, has a high rank in my eſteem, as worthy of the peruſal of every perſon

perſon who devotes himſelf to the ſtudy of *divinity*. Therein we frequently find our holy religion reduced to practice, and many parts of chriſtianity ſhining with a tranſcendent and exemplary light. We learn there how deeply ſenſible great and good men have been of the ruins of human nature by the firſt apoſtaſy from God, and how they have toild and laboured, and turned themſelves on all ſides, to ſeek a recovery in vain, till they have found the *goſpel of Chriſt* an all-ſufficient relief. We are there furniſhed with effectual and unanſwerable evidences that the *religion of Jeſus*, with all its ſelf-denials, virtues and devotions, is a very practicable thing, ſince it has been carried to ſuch a degree of honour by ſome wiſe and holy men. We have been there aſſured, that the pleaſures and ſatisfactions of the *chriſtian life*, in its preſent practice and its future hopes, are not the mere raptures of fancy and enthuſiaſm, when ſome of the ſtricteſt profeſſors of reaſon have added the ſanction of their teſtimony.

IN ſhort, the *lives* or *memoirs* of perſons of piety well written, have been of infinite and unſpeakable advantage to the diſciples and profeſſors of Chriſtianity, and have given us admirable inſtances and rules how to reſiſt every temptation of a ſoothing or a frowning world, how to practiſe important and difficult duties, how to love God above

above all, and to love our neighbours as ourſelves, to live by the faith of the Son of God, and to die in the ſame faith in ſure and certain hope of a reſurrection to eternal life.

XV. REMEMBER that *logic* and *ontology* or *metaphyſics* are neceſſary ſciences, though they have been greatly abuſed by ſcholaſtic writers who have profeſſed to teach them in former ages. Not only all *ſtudents*, whether they deſign the profeſſion of *theology*, *law* or *phyſic*, but all *gentlemen* ſhould at leaſt acquire a ſuperficial knowledge of them. The introduction of ſo many ſubtleties, nice diſtinctions, and inſignificant terms without clear ideas, has brought a great part of the *logic* and *metaphyſics* of the ſchools into juſt contempt. Their *logic* has appeared the mere art of wrangling, and their *metaphyſics* the ſkill of ſplitting an hair, of diſtinguiſhing without a difference, and of putting long hard names upon common things, and ſometimes upon a confuſed jumble of things which have no clear ideas belonging to them.

IT is certain, that an unknown heap of trifles and impertinences have been intermingled with theſe uſeful parts of learning, upon which account many perſons in this polite age have made it a part of their breeding to throw a jeſt upon them; and to

to rally them well, has been eſteemed a more valuable talent than to underſtand them.

BUT this is running into wide extremes; nor ought theſe parts of ſcience to be abandoned by the *wiſe*, becauſe ſome writers of former ages have played the fool with them. *True logic* teaches us to uſe our reaſon well, and brings light into the underſtanding: *true metaphyſics* or *ontology*, caſts a light upon all the objects of thought and meditation, by ranging every being with all the abſolute and relative perfections and properties, modes and attendants of it in proper ranks or claſſes, and thereby it diſcovers the various relations of things to each other, and what are their general or ſpecial differences from each other, wherein a great part of human knowledge conſiſts. And by this means it greatly conduces to inſtruct us in *method*, or the diſpoſition of every thing into its proper rank and claſs of beings, attributes or actions.

XVI. IF I were to ſay any thing of *natural philoſophy*, I would venture to lay down my ſentiments thus.

I THINK it muſt needs be very uſeful to a *divine* to underſtand ſomething of *natural ſcience*. The mere natural hiſtory of *birds*, *beaſts*, and *fiſhes*, of *inſects*, *trees* and *plants*, as well as of *meteors*, ſuch as *clouds*, *thunders*, *lightnings*, *ſnow*, *hail*, *froſt*,

froſt, &c. in all their common or uncommon appearances, may be of conſiderable uſe to one who ſtudies *divinity*, to give him a wider and more delightful view of the works of God, and to furniſh him with lively and happy images and metaphors drawn from the large volume of nature, to diſplay and repreſent the things of God and religion in the moſt beautiful and affecting colours.

AND if the mere *hiſtory* of theſe things be uſeful for this purpoſe, ſurely it will be of further advantage to be led into the *reaſons*, *cauſes* and *effects* of theſe natural objects and appearances, and to know the eſtabliſhed laws of nature, matter and motion, whereby the great God carries on his extenſive works of providence from the creation to this day.

I CONFESS, the old *Ariſtotelean* ſcheme of this ſcience, will teach us very little that is worth the knowing about theſe matters: but the later writers, who have explained nature and its operations in a more ſenſible and geometrical manner, are well worth the moderate ſtudy of a divine; eſpecially thoſe who have followed the principles of that wonder of our age and nation, Sir *Iſaac Newton*. There is much pleaſure and entertainment, as well as real profit, to be derived from thoſe admirable improvements which have been advanced in *natural philoſophy*

ſophy of late years, by the aſſiſtance of *mathematical* learning, as well as from the multitude of *experiments* which have been made and are ſtill making in natural ſubjects.

XVII. THIS is a ſcience which indeed eminently belongs to the *phyſician:* he ought to know all the parts of *human nature*, what are the ſound and healthy functions of an animal body, and what are the diſtempers and dangers which attend it; he ſhould alſo be furniſhed with a large knowledge of *plants* and *minerals*, and every thing which makes up the *materia medica*, or the ingredients of which medicines are made; and many other things in natural philoſophy are ſubſervient to his profeſſion, as well as to the kindred art of *ſurgery*.

XVIII. QUESTIONS about the *powers and operations of nature*, may alſo ſometimes come into the *lawyer's* cognizance, eſpecially ſuch as relate to aſſaults, wounds, murders, *&c.* I remember I have read a trial of a man for *murder by drowning*, wherein the judge on the bench heard ſeveral arguments concerning the lungs being filled or not filled with water, by inſpiration or expiration, *&c.* to all which he profeſſed himſelf ſo much a ſtranger, as did not do him any great honour in public.

XIX. BUT I think no *divine* who can obtain it, ſhould be utterly deſtitute of this know-

knowledge. By the aſſiſtance of this ſtudy, he will be better able to ſurvey the various monuments of creating wiſdom in the heavens, the earth and the ſeas, with wonder and worſhip: and by the uſe of a moderate ſkill in this ſcience, he may communicate ſo much of the aſtoniſhing works of God in the formation and government of this viſible world, and ſo far inſtruct many of his hearers, as may aſſiſt the transfuſion of the ſame ideas into their minds, and raiſe them to the ſame delightful exerciſes of devotion. *O Lord, how manifold are thy works? In wiſdom haſt thou made them all! They are ſought out by all that have pleaſure in them.*

BESIDES, it is worthy of the notice of every ſtudent in *theology*, that he ought to have ſome acquaintance with the *principles of nature*, that he may judge a little how far they will go; ſo that he may not be impoſed upon to take every ſtrange appearance in nature for a *miracle*, that he may reaſon the clearer upon this ſubject, that he may better confirm the miracles of *Moſes* and of *Chriſt*, nor yield up his faith to any pretences of *prodigy* and *wonder*, which are either the occaſional and uncommon operations of the elements, or the crafty ſleights of men well ſkilled in philoſophy and mechanical operations, to delude the ſimple.

XX. THE

XX. THE knowledge alſo of *animal nature* and of the *rational ſoul of man*, and the mutual influence of theſe two ingredients of our compoſition upon each other, is worthy the ſtudy of a *divine*. It is of great importance to perſons of this character and office, to judge how far the animal powers have influence upon ſuch and ſuch particular appearances and practices of mankind; how far the appetites or paſſions of human nature are owing to the fleſh and blood, or to the mind; how far they may be moderated, and how far they ought to be ſubdued; and what are the happieſt methods of obtaining theſe ends. By this ſcience alſo we may be better informed, how far theſe paſſions or appetites are lawful, and how far they are criminal, by conſidering how far they are ſubject to the power of the will, and how far they may be changed and corrected by our watchfulneſs, care and diligence.

IT comes alſo very properly under the cognizance of this profeſſion, to be able in ſome meaſure to determine queſtions which may ariſe relating to real *inſpiration* or *prophecy*, to wild *enthuſiaſm*, to fits of a *convulſive* kind, to *melancholy* or *phrenſy*, &c. and what directions are proper to be given concerning any appearances of this nature.

XXI. NEXT to the knowledge of *natural things*, and acquaintance with the

human nature and *conſtitution*, which is made up of ſoul and body, I think *natural religion* properly takes its place. This conſiſts of theſe two parts, *viz.* (1.) The *ſpeculative* or *contemplative*, which is the *knowledge of God* in his various perfections, and in his relations to his rational creatures, ſo far as may be known by the light of nature, which heretofore uſed to be called the *ſecond part of metaphyſics*. It concludes alſo (2.) That which is *practical* or *active*, which is the *knowledge of the ſeveral duties* that ariſe from our relation to God, and our relation to fellow-creatures, and our proper conduct and government of ourſelves: this has been uſed to be called *ethics*, or *moral philoſophy*.

XXII. THE knowledge of theſe things is proper for all men of learning; not only becauſe it teaches them to obtain juſter views of the ſeveral parts of *revealed religion*, and of *chriſtianity* which are built upon them, but becauſe every branch of natural religion and of moral duty is contained, and neceſſarily implied in all the revealed religions that ever God preſcribed to the world. We may well ſuſpect that religion does not come from God, which renounces any part of natural duty.

WHETHER mankind live under the diſpenſation of the *Patriarchs*, or of *Moſes*, or the *Prophets*, or of our Lord *Jeſus Chriſt*, ſtill

ſtill we are bound to know the one true God, and to practiſe all that adoration and reverence, all that love to him, that faith in his perfections, with that obedience and ſubmiſſion to his will, which *natural religion requires*. We are ſtill bound to exerciſe that juſtice, truth and goodneſs towards our neighbours, that reſtraint and moderation of our own appetites and paſſions, and that regular behaviour towards ourſelves and all our fellow-creatures around us, which *moral philoſophy* teaches. There is no ſort of revealed religion that will diſpenſe with theſe natural obligations: and a happy acquaintance with the ſeveral appetites, inclinations, and paſſions of human nature, and the beſt methods to rule and reſtrain, to direct and govern them, are our conſtant buſineſs, and ought to be our everlaſting ſtudy.

YET I would lay down this *caution*, viz. That ſince ſtudents are inſtructed in the *knowledge of the true God* in their lectures on *Chriſtianity*, and ſince among the *Chriſtian* duties they are alſo taught all the *moral dictates* of the light of nature, or a complete ſcheme of *ethics*, there is no abſolute neceſſity of learning theſe two parts of *natural* religion, as diſtinct ſciences, ſeparate and by themſelves: but ſtill it is of great importance for a tutor, while he is reading to his pupils theſe parts of the *Chriſtian* religion, to give them notice

how far the light of nature or mere reaſon will inſtruct us in theſe doctrines and duties, and *how far* we are obliged to divine revelation and ſcripture, for clearing up and eſtabliſhing the firm foundations of the one, for affording us ſuperior motives and powers to practiſe the other, for raiſing them to more exalted degrees, and building ſo glorious a ſuperſtructure upon them.

XXIII. THE ſtudy of *natural religion, viz.* The knowledge of God and the rules of virtue and piety, as far as they are diſcovered by the light of nature, is needful indeed to prove the truth of *divine revelation* or *ſcripture*, in the moſt effectual manner: but after the divine authority of ſcripture is eſtabliſhed, that will be a very ſufficient ſpring from whence the bulk of mankind may derive their knowledge of *divinity* or the *Chriſtian religion*, in order to their own preſent faith and practice, and their future and eternal happineſs. In this ſenſe *theology* is a ſcience, neceſſary for every one that hopes for the favour of God and the felicity of another world; and it is of infinitely more importance than any of the arts and ſciences, which belong to any of the learned profeſſions here on earth.

XXIV. PERHAPS it will be thought neceſſary I ſhould ſay ſomething concerning the ſtudy of the *civil law*, or the law of nature and nations.

IF we would ſpeak with great juſtneſs and propriety, the *civil law* ſignifies the peculiar law of each ſtate, country or city: but what we now uſually mean by the *civil law*, is a body of laws compoſed out of the beſt of the *Roman* and *Grecian* laws, and which was in the main received and obſerved through all the *Roman* dominions for above twelve hundred years.

The *Romans* took the firſt grounds of this law from what they call *the twelve tables*, which were the abridgments of the laws of *Solon* at *Athens*, and of other cities in *Greece*, famous for knowledge and wiſdom; to which they added their own antient cuſtoms of the city of *Rome*, and the laws which were made there. Theſe written laws were ſubject to various interpretations, whence controverſies daily ariſing, they were determined by the judgment of the learned; and theſe determinations were what they firſt called *jus civile*. All this by degrees grew to a vaſt number of volumes; and therefore the emperor *Juſtinian*, commanded his chancellor *Tribonian* to reduce them to a perfect body, and this is called *the body of the civil law*.

XXV. BUT that which is of moſt importance for all learned men to be acquainted with is the *law of nature*, or the knowledge of right and wrong among mankind, whether it be tranſacted between ſingle

perſons or communities, ſo far as common reaſon and the light of nature dictate and direct. This is what *Puffendorf* calls the *law of nature and nations*, as will appear if you conſult ſect. 3. chap. III. of that moſt valuable *folio* he has written on the ſubject; which is well worthy the ſtudy of every man of learning, particularly *lawyers* and *divines*, together with other treatiſes on the ſame theme.

IF any queſtion propoſed relate to right and property, and juſtice between man and man, in any polite and civilized country, though it muſt be adjudged chiefly according to the particular ſtatutes and laws of that country, yet the knowledge of the *law of nature* will very conſiderably aſſiſt the *lawyer* and the civil *judge* in the determination thereof. And this knowledge will be of great uſe to *divines*, not only in deciding of caſes of conſcience among men, and anſwering any difficult enquiries which may be propoſed to them on this ſubject, but it will greatly aſſiſt them alſo in their ſtudies relating to the law of God, and the performance or violation thereof, the nature of duty and ſin, reward and puniſhment.

XXVI. I HAVE ſpoken ſomething of the *languages* before, but let me here reſume the ſubject, and put in a few thoughts about thoſe ſtudies which are wont to be called *philo-*

philological; ſuch as *hiſtory*, *languages*, *grammar*, *rhetoric*, *poeſy*, and *criticiſm*.

AN acquaintance with ſome of the *learned languages* at leaſt, is neceſſary for all the three learned profeſſions.

XXVII. THE *lawyers*, who have the leaſt need of foreign tongues, ought to underſtand *Latin*. During many ages paſt, very important matters in the *law* were always written and managed in that language by the *lawyers*, as preſcriptions in medicine by the *phyſicians*, and citations of the ſcriptures in divinity were always made in *Latin* by the *divines*. Prayers alſo were ordained to be ſaid publicly and privately in the *Roman* tongue: *Pater-noſters* and *Ave-marias* were half the devotion of thoſe ages. Theſe cruel impoſitions upon the people, would not ſuffer them to read in their own mother tongue what was done, either to or for, their own *ſouls*, their *bodies*, or their *eſtates*. I am ready to ſuſpect this was all owing to the craft and policy of the prieſthood and church of *Rome*, which endeavoured to aggrandize themſelves, and exalt their own profeſſion into a ſovereign tyranny, and to make mere ſlaves of the *laity* among mankind, by keeping them in utter ignorance, darkneſs and dependance. And they were willing to compound the matter with the *phyſicians* and the *lawyers*, and allow them a ſmall ſhare in this

tyranny over the populace, to maintain their own ſupreme dominion over all.

BUT we thank God, the world is grown ſomething wiſer; and of late years, the *Britiſh parliament* has been pleaſed to give relief from that bondage in matters relating to the *law* alſo, as in the age of the reformation we were delivered from ſaying our prayers in *Latin*, from being bound to read the word of God in a tongue unknown to the people, and from living in an everlaſting ſubjection to the clergy in matters of this life and the life to come.

BUT to return. There are ſtill ſo many forms of proceedings in judicature, and things called by *Latin* names in the profeſſion of the law, and ſo many barbarous words with *Latin* terminations, that it is neceſſary *lawyers* ſhould underſtand this language. Some acquaintance alſo with the old *French* tongue is needful for the ſame perſons and profeſſion, ſince the tenures of *Littleton*, which are a ſort of Bible to the gentlemen of the long robe, were written in that language: and this tongue has been interwoven in ſome forms of the *Engliſh* law, from the days of *William* the conqueror, who came from *Normandy* in *France*

XXVIII. *PHYSICIANS* ſhould be ſkilled in the *Greek* as well as in the *Latin*, becauſe their great maſter *Hippocrates* wrote in that

that tongue, and his writings are ſtill of good value and uſe. A multitude of the names, both of the parts of the body, of diſeaſes, and of medicines, are derived from the *Greek* language: and there are many excellent books of *phyſic* both in the theoretical and practical parts of it, which are delivered to the world in the *Roman* tongue, and of which that profeſſion ſhould not be ignorant.

XXIX. SUCH as intend the ſtudy of *theology*, ſhould be well acquainted alſo with the *Latin*, becauſe it has been for many hundred years the language of the ſchools of learning: their diſputations are generally limited to that language, and many and excellent books of divinity muſt be entirely concealed from the ſtudents, unleſs they are acquainted with *Latin* authors.

BUT thoſe that deſign the ſacred profeſſion of *theology*, ſhould make it their labour of chief importance to be very converſant with their Bibles, both in the Old and New Teſtament: and this requires ſome knowledge of thoſe original languages, *Greek* and *Hebrew*, in which the ſcriptures were written. All that will purſue theſe ſtudies with honour, ſhould be able to read the Old Teſtament tolerably in the *Hebrew* tongue: at leaſt they ſhould be ſo far acquainted with it, as to find out the ſenſe of a text by the help of a dictionary. But

ſcarce

ſcarce any man ſhould be thought worthy of the name of a ſolid divine or a ſkilful teacher of the goſpel in theſe days of light and liberty, unleſs he has pretty good knowledge of the *Greek*, ſince all the important points of the *Chriſtian* religion are derived from the *New Teſtament*, which was firſt written in that language.

XXX. As for the *Syriac* and *Arabic* tongues, if one divine in thirty or in three hundred, travel far into theſe regions, it is enough. A few learned men ſkilled in theſe languages, will make ſufficient remarks upon them for the ſervice of the whole *Chriſtian* world; which remarks may ſometimes happen to be of uſe to thoſe *divines*, who are unacquainted with them in reading the Bible. But the advantage of theſe tongues is not of ſo great importance as it has been too often repreſented. My reader will agree with me when he conſiders, that the chief *uſes* of them are theſe.

THE *Arabic* is a language which has ſome kindred and affinity to the *Hebrew*, and perhaps we may now and then gueſs at the ſenſe of ſome uncommon and doubtful *Hebrew* word, which is found but once or twice in the Bible, by its ſuppoſed affinity to the *Arabic:* but whatſoever conjectures may be made by ſome kindred of a *Hebrew* word to an *Arabic* root, yet there is no certainty to be gathered from it; for even words

words of the ſame language which are undoubtedly derived from the ſame theme or primitive, will give us but very doubtful and ſorry information concerning the true ſenſe of kindred words which ſpring from the ſame theme.

LET me give a plain inſtance or two of this uncertainty. The word *ſtrages* ſignifies *ſlaughter*; *ſtratum* is *Latin* for a *bed*; *ſtramen* is *ſtraw*; and *ſtragulum* is a *quilt* or coverlet: they are all drawn and derived from *ſterno*, which ſignifies to *throw down*, *to kill*, or to *ſpread abroad*. Let the critics tell me what certain ſenſe they could put upon either of thoſe four words by their mere cognation with each other, or their derivation from one common verb. Again, who could tell me the certain meaning and preciſe idea of the word *honeſt* in *Engliſh*, and aſſure me that it ſignifies a *man* of *integrity*, *juſtice* and *probity*, though it is evidently derived from *honeſtus* in *Latin?* Whereas *honeſtus* hath a very different idea, and ſignifies *a man of ſome figure in the world*, or *a man of honour*. Let any man judge then, how little ſervice toward explaining the *Hebrew* tongue can be furniſhed from all the language of *Arabia*. Surely a great part of the long learned fatigues and tireſome travels of men through this country, is almoſt vain and uſeleſs to make the *Hebrew* Bible better underſtood.

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As for the *Syriac* language, it is granted there may be ſome ſmall advantage drawn from the knowledge of it, becauſe there is a very ancient tranſlation of the *New Teſtament* in that tongue: and perhaps this may ſometimes give a proper and appoſite meaning to a difficult and doubtful text, and offer a fair hint for recovering the true meaning of the ſcripture from the perverſe gloſſes of other writers. But there are ſeveral commentators and *lexicographers* who have been acquainted with the *Syriac* language, and have given us the chief of theſe hints in their writings on ſcripture.

AND after all, ſince none of theſe aſſiſtances can yield us a ſufficient proof of a true interpretation, and give us the certain ſenſe of a text, who would be perſuaded to waſte any great number of his better hours in ſuch dry ſtudies, and in labours of ſo little profit?

XXXI. THE *Chaldean* language indeed is much nearer to the *Hebrew*, and it is proper for a *divine* to have ſome acquaintance with it, becauſe there are ſeveral verſes or chapters of *Ezra* and *Daniel* which are written in that language; and the old *Jewiſh targums* or commentaries, which are written in the *Chaldean* tongue, may ſometimes happen to caſt a little light upon a doubtful ſcripture of the *Old Teſtament*.

BUT it muſt be ſtill owned, that the knowledge of the *Eaſtern* tongues does not

not deſerve to be magnified to ſuch a degree, as ſome of the proficients in them have indulged; wherein they have carried matters beyond all reaſon and jnſtice, ſince ſcarcely any of the moſt important ſubjects of the goſpel of *Chriſt* and the way of ſalvation, can gain any advantage from them.

XXXII. THE art of *grammar* comes now to be mentioned. It is a diſtinct thing from the mere knowledge of the languages; for all mankind are taught from their infancy to ſpeak their mother-tongue, by a natural imitation of their mothers and nurſes, and thoſe who are round about them, without any knowledge of the art of *grammar*, and the various obſervations and rules that relate to it. *Grammar* indeed, is nothing elſe but rules and obſervations drawn from the common ſpeech of mankind in their ſeveral languages; and it teaches us to ſpeak and pronounce, to ſpell and write with propriety and exactneſs, according to the cuſtom of thoſe in every nation who are, or were ſuppoſed to ſpeak and write their own language beſt. Now it is a ſhame for a man to pretend to ſcience and ſtudy in any of the three learned profeſſions, who is not in ſome meaſure acquainted with the propriety of thoſe languages with which he ought to be converſant in his daily ſtudies, and more eſpecially in ſuch as he may ſometimes be called upon to write as well as read.

XXXIII.

XXXIII. NEXT to *grammar*, we proceed to conſider *rhetoric*.

Now *rhetoric* in general is the *art of perſuading*, which may be diſtinguiſhed into theſe three parts; *viz.* (1.) Conveying the ſenſe of the ſpeaker to the underſtanding of the hearers in the cleareſt and moſt intelligent manner, by the plaineſt expreſſions and the moſt lively and ſtriking repreſentations of it, ſo that the mind may be thoroughly convinced of the thing propoſed. (2.) Perſuading the will effectually to chuſe or refuſe the thing ſuggeſted and repreſented. (3.) Raiſing the paſſions in the moſt vivid and forcible manner, ſo as to ſet all the ſoul and every power of nature at work, to purſue or avoid the thing in debate.

To attain this end, there is not only a great deal of art neceſſary in the repreſentation of matters to the auditory, but alſo in the diſpoſition or method of introducing theſe particular repreſentations, together with the reaſons which might convince, and the various methods which might perſuade and prevail upon the hearers. There are certain ſeaſons, wherein a violent torrent of oration in a diſguiſed and concealed method, may be more effectual than all the nice forms of *logic* and reaſoning. The figures of *interrogation* and *exclamation*, have ſometimes a large place and happy effect in this ſort of diſcourſe, and no figure of

of ſpeech ſhould be wanting here, where the ſpeaker has art enough happily to introduce it.

THERE are many *remarks* and *rules* laid down by the teachers of this art, to improve a young genius into thoſe glorious talents whereby *Tully* and *Demoſthenes* acquired that amazing influence and ſucceſs in their own age and nation, and that immortal fame through all nations and ages. And it is with great advantage theſe rules may be peruſed and learned. But a happy genius, a lively imagination, and warm paſſions, together with a due degree of knowledge and ſkill in the ſubject to be debated, and a perpetual peruſal of the writings of the beſt orators, and hearing the beſt ſpeakers, will do more to make an orator, than all the rules of art in the world, without theſe natural talents and this careful imitation of the moſt approved and happieſt orators.

XXXIV. Now you will preſently ſuppoſe, that *pleaders at the bar* have great need of this art of *rhetoric*; but it has been a juſt doubt, whether pleading in our *Britiſh* courts of juſtice, before a ſkilful judge, ſhould admit of any other aid from *rhetoric*, than that which teaches to open a cauſe clearly, and ſpread it in the moſt perſpicuous, complete and impartial manner before the eyes of him that judges: for impartial juſtice being the thing which is ſought, there ſhould be no artifices uſed,

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no eloquence or powers of language employed to perſuade the will, or work upon the paſſions, leſt the deciſive ſentence of the judge ſhould be biaſſed or warped into injuſtice. For this reaſon, Mr. *Locke* would baniſh all *pleaders* in the law for fees, out of his government of *Carolina*, in his poſthumous works; though perhaps that great man might poſſibly be too ſevere, in ſo univerſal a cenſure of the profeſſion.

XXXV. BUT the caſe is very different with regard to *divines:* the eloquence of the pulpit, beyond all controverſy, has a much larger extent.

THEIR buſineſs is not to plead a cauſe of right and wrong before a wiſe and ſkilful judge, but to addreſs all the ranks of mankind, the high and low, the wiſe and the unwiſe, the ſober and the vicious, and perſuade them all to purſue and perſevere in virtue with regard to themſelves, in juſtice and goodneſs with regard to their neighbours, and piety towards God. Theſe are affairs of everlaſting importance, and moſt of the perſons to whom theſe addreſſes are made, are not wiſe and ſkilful judges, but are influenced and drawn ſtrongly to the contrary ſide by their own ſinful appetites and paſſions, and bribed or biaſſed by the corrupt cuſtoms of the world.

THERE is therefore a neceſſity not only of a clear and faithful repreſentation of things

things to men, in order to convince their reaſon and judgment, but of all the ſkill and force of perſuaſion addreſſed to the will and the paſſions. So *Tully* addreſſed the whole ſenate of *Rome*, and *Demoſthenes* the *Athenian* people, among whom were capacities and inclinations of infinite variety; and therefore they made uſe of all the lightning and thunder, all the entreaties and terrors, all the ſoothing elegancies and the flowery beauties of language which their art could furniſh them with. *Divines* in the pulpit have much the ſame ſort of hearers, and therefore they ſhould imitate thoſe ancient examples. The *underſtanding* indeed ought to be firſt convinced, by the plaineſt and ſtrongeſt force of reaſoning; but when this is done, all the powerful motives ſhould be uſed which have any juſt influence upon human nature, all the ſprings of paſſion ſhould be touched, to awaken the ſtupid and the thoughtleſs into conſideration, to penetrate and melt the hardeſt heart, to perſuade the unwilling, to excite the lazy, to reclaim the obſtinate, and reform the vicious part of mankind, as well as to encourage thoſe who are humble and pious, and to ſupport their practice and their hope. The tribes of men are ſunk into ſo fatal a degeneracy and dreadful diſtance from God, and from all that is holy and happy, that all the eloquence

which a preacher is maſter of, ſhould be employed, in order to recover the world from its ſhameful ruin and wretchedneſs by the goſpel of our bleſſed Saviour, and reſtore it to virtue and piety, to God and happineſs, by the divine power of this goſpel. O may ſuch glorious maſters of ſacred oratory never be wanting in the pulpits of *Great-Britain!*

XXXVI. SHALL I now ſpeak ſomething of my ſentiments concerning *poeſy?*

As for books of *poeſy*, whether in the learned or in the modern languages, they are of great uſe to be read at hours of leiſure, by all perſons that make any pretence to good education or learning; and that for ſeveral reaſons.

1. BECAUSE there are many couplets or ſtanzas written in poetic meaſures, which contain a *variety of morals or rules of practice* relating to the common prudentials of mankind, as well as to matters of *religion*, and the poetic numbers (or rhyme, if there be any) add very conſiderable force to the memory.

BESIDES, many an elegant and admirable ſentiment or deſcription of things which are found among the poets, are well worth committing to memory, and the particular meaſures of verſe greatly aſſiſt us in recollecting ſuch excellent paſſages, which

which might ſometimes raiſe our converſation from low and grovelling ſubjects.

2. IN *heroic verſe*, but eſpecially in the *grander lyrics*, there are ſometimes ſuch noble elevations of thought and paſſion as illuminate all things around us, and convey to the ſoul moſt exalted and magnificent images and ſublime ſentiments: theſe furniſh us with glorious ſprings and *mediums* to raiſe and aggrandize our conceptions, to warm our ſouls, to awaken the better paſſions, and to elevate them even to a divine pitch, and that for devotional purpoſes. It is the *lyric ode* which has ſhewn to the world ſome of the happieſt examples of this kind, and I cannot ſay but this part of poeſy has been my favourite amuſement above all others.

AND for this reaſon it is, that I have never thought the *heroic* poems, *Greek*, *Latin*, nor *Engliſh*, which have obtained the higheſt fame in the world, are ſufficiently diverſified, exalted or animated, for want of the interſperſion of now and then an *elegiac* or a *lyric ode*. This might have been done with great and beautiful propriety, where the poet has introduced a ſong at a feaſt, or the joys of a victory, or the ſoliloquies of divine ſatisfaction, or the penſive and deſpairing agonies of diſtreſſing ſorrow. Why ſhould that which is called the *moſt glorious form of poeſy*, be bound

down and confined, to ſuch a long and endleſs uniformity of meaſures, when it ſhould kindle or melt the ſoul, ſwell or ſink it into all the various and tranſporting changes of which human nature is capable?

COWLEY in his unfiniſhed fragment of the *Davideis*, has ſhewn us this way to improvement; and whatever blemiſhes may be found in other parts of that *heroic eſſay*, this beauty and glory of it ought to be preſerved for imitation. I am well aſſured, that if *Homer* and *Virgil* had happened to practiſe it, it would have been renowned and glorified by every critic. I am greatly miſtaken, if this wiſe mixture of numbers would not be a further reach of perfection than they have ever attained to without it: let it be remembered, that it is not nature and ſtrict reaſon, but a weak and awful reverence for antiquity and the vogue of fallible men, that has eſtabliſhed thoſe *Greek* and *Roman* writings as abſolute and complete patterns. In ſeveral ages there have been ſome men of learning, who have very juſtly diſputed this glory, and have pointed to many of their miſtakes.

3. BUT ſtill there is another end of reading poeſy, and perhaps the moſt conſiderable advantage to be obtained from it by the bulk of mankind, and that is, to furniſh our tongues with the richeſt and the moſt polite variety of phraſes and words upon all

all occaſions of life or religion. He that writes well in verſe will often find a neceſſity to ſend his thoughts in ſearch through all the treaſure of words that expreſs any one idea in the ſame language, that ſo he may comport with the meaſures, or the rhyme of the verſe which he writes, or with his own moſt beautiful and vivid ſentiments of the thing he deſcribes. Now by much reading of this kind we ſhall inſenſibly acquire the habit and ſkill of diverſifying our phraſes upon all occaſions, and of expreſſing our ideas in the moſt proper and beautiful language, whether we write or ſpeak of the things of God or men.

IT is pity that ſome of theſe harmonious writers have ever indulged any thing uncleanly or impure to defile their paper, and abuſe the ears of their readers, or to offend againſt the rules of the niceſt virtue and politeneſs: but ſtill, amongſt the writings of Mr. *Dryden* and Mr. *Pope*, and Dr. *Young*, as well as others, there is a ſufficient choice in our own language, wherein we ſhall not find any indecency to ſhock the moſt modeſt tongue or ear.

PERHAPS there has hardly been a writer in any nation, and I may dare to affirm, there is none in ours, has a richer and happier talent of painting to the life, or has ever diſcovered ſuch a large and inexhauſted variety of deſcription as the celebrated Mr.

Mr. *Pope.* If you read his tranſlation of *Homer's Iliad,* you will find almoſt all the terms or phraſes in our tongue that are needful to expreſs any thing that is grand or magnificent: but if you peruſe his *Odyſſee,* which deſcends much more into common life, there is ſcarcely any uſual ſubject of diſcourſe or thought, or any ordinary occurrence which he has not cultivated and dreſſed in the moſt proper language; and yet ſtill he has ennobled and enlivened even the lower ſubjects, with the brighteſt and moſt agreeable ornaments.

I SHOULD add here alſo, that if the ſame author had more frequently employed his pen on divine themes, his ſhort poem on the *Meſſiah,* and ſome part of his letters between *Abelard* and *Eloiſa,* with that ode of the *dying Chriſtian, &c.* ſufficiently aſſure us, that his pen would have honourably imitated ſome of the tender ſcenes of penitential ſorrow, as well as the ſublimer odes of the *Hebrew* pſalmiſt; and perhaps diſcovered to us in a better manner than any other tranſlation has done, how great a poet ſat upon the throne of *Iſrael.*

4. AFTER all that I have ſaid, there is yet a further uſe of reading *poeſy,* and that is, when the mind has been fatigued with ſtudies of a more laborious kind, or when it is any ways unfit for the purſuit of more difficult

difficult ſubjects, it may be as it were unbent, and repoſe itſelf a while on the flowery meadows where the muſes dwell. It is a very ſenſible relief to the ſoul when it is over-tired, to amuſe itſelf with the numbers and the beautiful ſentiments of the poets; and in a little time, this agreeable amuſement may recover the languid ſpirits to activity and more important ſervice.

XXXVII. ALL this I propoſe to the world as my beſt obſervations about reading of verſe. But if the queſtion were offered to me, *Shall a ſtudent of a bright genius never divert himſelf with writing poeſy?* I would anſwer, *Yes, when he cannot poſſibly help it:* a lower genius in mature years, would heartily wiſh that he had ſpent much more time in reading the beſt authors of this kind, and employed much fewer hours in writing. But it muſt be confeſſed, or ſuppoſed at leaſt, that there may be ſeaſons when it is hardly poſſible for a poetic ſoul to reſtrain the fancy or quench the flame, when it is hard to ſuppreſs the exuberant flow of lofty ſentiments, and prevent the imagination from this ſort of ſtyle or language: and that is the only ſeaſon I think, wherein this inclination ſhould be indulged; eſpecially by perſons who have devoted themſelves to profeſſions of a different kind: and one reaſon is, becauſe what they write in that hour, is more likely

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to carry in it ſome appearances above nature, ſome happy imitation of the dictates of the muſe *.

XXXVIII. THERE are other things beſides *hiſtory*, *grammar* and *languages*, *rhetoric* and *poeſy*, which have been included under the name of *philological* knowledge; ſuch as, an acquaintance with the *notions*, *cuſtoms*, *manners*, *tempers*, *polity*, &c. of the various nations of the earth, or the diſtinct ſects and tribes of mankind. This is neceſſary, in order to underſtand *hiſtory* the better; and every man who is a *lawyer* or a *gentleman*, ought to obtain ſome acquaintance with theſe things, without which he can never read *hiſtory* to any great advantage, nor can he maintain his own ſtation and character in life with honour and dignity, without ſome inſight into them.

XXXIX. STUDENTS in *divinity* ought to ſeek a larger acquaintance with the *Jewiſh* laws, polity, cuſtoms, *&c.* in order to underſtand many paſſages of the Old Teſtament and the New, and to vindicate the ſacred writers from the reproaches of infidels. An acquaintance alſo with many of

* The *muſe* in the ancient *heathen* ſenſe is ſuppoſed to be a goddeſs; but in the *philoſophic* ſenſe it can mean no more, than a bright genius with a warm and ſtrong imagination, elevated to an uncommon degree.

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XL. THE art of *criticiſm* is reckoned by ſome as a diſtinct part of *philology*; but it is in truth nothing elſe, than a more exact and accurate knowledge or ſkill in the other parts of it, and a readineſs to apply that knowledge upon all occaſions, in order to judge well of what relates to theſe ſubjects, to explain what is obſcure in the authors which we read, to ſupply what is defective, and amend what is erroneous in manuſcripts or ancient copies, to correct the miſtakes of authors and editors in the ſenſe or the words, to reconcile the controverſies of the learned, and by this means to ſpread a juſter knowledge of theſe things among the inquiſitive part of mankind.

EVERY man who pretends to the learned profeſſions, if he doth not ariſe to be *critic* himſelf in *philogical* matters, he ſhould be frequently converſing with thoſe books, whether dictionaries, paraphraſts, commentators, or other critics, which may relieve any difficuties he meets with, and give him a more exact acquaintance with thoſe ſtudies which he purſues.

AND whenſoever any perſon is arrived to ſuch a degree of knowledge in theſe things, as to furniſh him well for the practice of *criticiſm*, let him take great care that pride and vanity, contempt of others, with inward wrath and inſolence, do not mingle themſelves with his remarks and cenſures. Let him remember the common frailties of human nature, and the miſtakes to which the wiſeſt man is ſometimes liable, that he may practiſe this art with due modeſty and candour.

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